

The Library of Congress Office of the Inspector General



Library-wide

New Hiring Process and System: Project Management And Contracting Improvements Needed

> Audit Report No. 2001-IT-305 February 2002

Memorandum

Office of the Inspector General

TO: James H. Billington February 12, 2002

Librarian of Congress

FROM: Karl W. Schornagel

Inspector General

SUBJECT: New Hiring Process and System: Project Management and

Contracting Improvements Needed, Audit Report 2001-IT-305

Attached is the final audit report on the Library's implementation of the new hiring process and automated system that you requested in your 30 July 2001 memorandum. We found that progress has been made in transitioning to the new process and system and that the number of applicants per vacancy has increased significantly. However, due to the lack of a formal project management framework and corresponding management controls, implementation has been slow, resulting in a substantial backlog in filling critical Library job vacancies.

The report contains a series of recommendations designed to help control remaining implementation and operations tasks and better prepare for future implementation efforts. We recommend using specific project management tools to control work and provide management with relevant, current, and accurate information to oversee project activities, and improve support to Library users responsible for hiring staff.

We emphasize the need to plan and execute a post-implementation evaluation to determine if process or system changes are needed and whether alternative systems need to be explored. Due to the lead time necessary to plan and evaluate the process and system, and the time that may be needed for market research and procurement, we urge the Library to maintain a tight schedule for completing these tasks.

Please provide a consolidated corrective action plan within 30 days that addresses each recommendation, including an implementation schedule (see LCR1519-1, Section 4). We will follow up on implementation of the recommendations in the spring. We appreciate the cooperative spirit shown by Library staff and look forward to working with you to improve the Library's hiring capability.

cc: Executive Committee:

Deputy Librarian and Chairman

Director, Congressional Research Service

Chief of Staff

Associate Librarian for Strategic Initiatives

Associate Librarian for Library Services

Register of Copyrights and Associate Librarian for Copyright Services

Law Librarian

Director, Human Resources Services

Project Manager (Director, Office of Planning, Management, and Evaluation)

General Counsel

Director, Integrated Support Services

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EXECUTIVE SUMMARY

The January 2001 Amended Appendix B settlement agreement to the Cook Case required the Library of Congress to have a content-valid automated hiring system operational by 1 March 2001. The Amended Appendix B covers professional, administrative, and supervisory technical positions and eliminates minimum qualifications; time-in-grade requirements; and written knowledge, skills, and abilities to determine whether applicants meet required qualifications. The Library is implementing this automated process by deploying Avue Technologies' Avue Digital Services (ADS), an on-line subscription service/system for classifying and staffing vacant positions.

The Office of the Inspector General (OIG) audited ADS implementation based on the Librarian's 30 July 2001 request. We found that the Library significantly underestimated the risk and complexity of reengineering and automating its hiring process. Progress is being made, but posting and filling vacancy announcements has been slow. In December 2001, the Library requested authorization from Congress to realign \$14.8 million in FY 2002 funding from salaries and benefits to other contractual services. The funds are needed to pay for contractors to perform Library operational duties because vacancies are not being filled fast enough to sustain the workforce.

There are a variety of contributing factors. The Library did not use a project management framework, concepts, and tools to monitor implementation progress and operations. The Library did not thoroughly evaluate ADS as a workable system before choosing the subscription service. After choosing ADS, the Library did not use detailed operating procedures and a centralized function for dealing with internal systemic questions and problems. Also, we found that the Library did not develop short- and long-term contractual strategies to ensure that data rights were protected and that the hiring capability would be uninterrupted. Human Resources Services (HRS) and the Office of the General Counsel did not explore the operating consequences of ADS in the context of Amended Appendix B. HRS did not clearly communicate requirements changes to the system vendor. In addition, the Library did not develop a post-implementation plan to determine if the new hiring process meets the Library's needs, or if ADS successfully and efficiently automates the new process.

We briefed the Executive Committee on 27 August 2001 and recommended that it appoint a project manager as soon as possible. In addition, we issued interim guidance on 29 August recommending specific project manager authorities and responsibilities. In a subsequent memorandum on 5 September we recommended contract clauses, negotiation strategies, and specific Library staff needed for subsequent negotiations for subscription hiring services. We also outlined in a 21 September memorandum project management-related issues that needed immediate attention.

While the Library has assigned a project manager, additional action is required to ensure successful reengineering, implementation, and management of the new hiring process and

automated system. Specifically, the Project Manager needs to establish project plans and use tools to monitor the reengineering and implementation process and report significant events and progress to the Executive Committee. The Project Manager should also facilitate the issuance of detailed operating procedures and ensure that a centralized "Help Desk" is expanded to assist Library users. The Contracting Officer's Technical Representative should use the Avue Technologies' configuration change request process to document and submit system modifications to the vendor. The Project Manager should conduct a post-implementation review and report to the Executive Committee as soon as possible whether the current hiring system and process are functioning properly and meet the Library's needs. Finally, the Library should base all future contracting decisions for hiring-related services on sound business case analyses and include in the process representatives with expertise in contracting, human resources, information technology, and law.

We issued a preliminary draft report on 29 October 2001 to the Director of HRS and the Project Manager. The Director of HRS provided a response to the preliminary draft report on 15 November 2001. A final draft report was issued on 30 November. We received responses to the draft report from the Director of HRS, the Associate Librarian for Strategic Initiatives, the Director of the Congressional Research Service (CRS), the Project Manager, the Chief of Staff, the General Counsel, and the Director of Integrated Support Services.

The HRS Director disagreed with our findings and recommendations; the other respondents generally agreed with most of our findings and recommendations. Some service units questioned the appropriateness of the Amended Appendix B. We did not address the appropriateness of the Amended Appendix B as it was beyond the scope of our audit. Formal responses received from HRS, CRS, the Project Manager, and the Chief of Staff are included in this report as Appendixes C through F. The remaining service units provided informal comments. All responses were considered in preparing the final report, and in some cases, we modified the report accordingly. Library responses and OIG comments are included after each recommendation beginning on page 7.

Allegations were made that service units contributed significantly to delays in implementation. Our interviews showed that users lacked confidence in the process and system and as a result, may have been less supportive. However, we were unable to obtain evidence to substantiate the existence of any deliberate delayed action by the service units. The Project Manager proposes completing a post-implementation review by 1 April 2002. It is important that the Project Manager adheres to this schedule so that there is sufficient time to evaluate and contract for alternative solutions, if needed. It is also important that the Executive Committee receive frequent status reports addressing implementation/operational issues and the Library's progress in filling vacancies.

INTRODUCTION

The Library of Congress is implementing a new hiring process and automated system for professional, administrative, and supervisory technical positions. The new process features content-valid classification and staffing functions. To be content-valid, classification and staffing must be traceable to specific tasks in position descriptions validated by subject matter experts (SME). Classification consists of determining the tasks of the position and performing an analysis of the tasks to determine the grade and series of the position, resulting in a position description. Staffing consists of preparing and posting a vacancy announcement, generating applicant questionnaires, ranking the applicants, interviewing the applicants, and selecting an applicant for the position. SMEs are individuals who are knowledgeable of the tasks performed by the position and are the same or higher-grade level of the position. SME panels and representatives from the Library's Human Resources Services (HRS) review and approve position descriptions and job analysis documentation, rankings, and interview questions. SME panels conduct structured interviews and score applicants selected for interviews. Selecting officials make final selection decisions.

The Library is automating its content-valid classification and staffing process by deploying Avue Technologies' (AT) Avue Digital Services (ADS). ADS is a subscription service providing the Library internet access to software modules and databases of work tasks performed by a particular position that can be classified into a position description and ultimately staffed (filled) on-line. By ADS being a subscription service, AT owns and maintains both the software and database and provides assurance that the subscribed modules conform to the various laws and regulations that apply to the Library. ADS consists of four modules: Classification, Staffing, Workforce Management, and Workers Compensation. AT claims that the ADS Classification and Staffing modules provide on-line classification, job analysis, crediting plans, vacancy announcements, interview questions, performance plans, and individual development plans. Job analysis is the process of determining the criteria against which applicants will be assessed. Crediting plans document how applicants will be rated.

According to AT, the Workforce Management module provides expert analysis, risk assessment, documentation, and on-line training in compensation administration, performance management, appraisals, employee and career development, employee and labor relations, and equal employment opportunity and affirmative action. The workers compensation module provides a practical guide to management officials, union representatives, and injured workers for handling virtually all Federal Employees Compensation Act claims that arise in the course of federal employment. The workforce management and workers compensation modules are currently not utilized at the Library.

ADS is covered by an Indefinite Delivery Indefinite Quantity contract with AT issued by the Veterans Administration. The Library pays 2.5 percent of the contract value to the General Services Administration to be the Library's contracting officer. The Library's contract with AT was signed September 2000 and includes 5 option years. Total contract value with options is

\$2,659,375. The annual subscription rate is based on the Library's budgeted full time equivalent (FTE) positions, which falls into ADS' 3,000 - 5,000 service range. For an additional \$500,000, two contractors provided additional support services to assist the Library in announcing and filling positions last summer and fall. All library positions are covered by the subscription, however, ADS will be utilized by the Library only for professional, administrative, and supervisory technical positions.

HRS initially handled project management and Contracting Officer's Technical Representative (COTR) authorities and responsibilities for the ADS implementation. As of October 2001 the Director, Office of Planning, Management, and Evaluation has been assigned project management and COTR authority.

BACKGROUND

In November 1975 some employees filed a third-party administrative complaint alleging discrimination in the Library's hiring practices. The Library denied the complaint in January 1982. Subsequently, the employees filed a lawsuit (Cook v. Boorstin) against the Library in the U.S. District Court for the District of Columbia. Counsel for the Library and the plaintiffs were in settlement negotiations on and off since 1982. A final settlement agreement was reached in September 1995. In July 1998 Cook plaintiffs filed a motion to request that "the Court appoint a Receiver within the personnel department of the Library of Congress to implement and to oversee the Library's timely compliance with its obligations under the Settlement Agreement and Consent Decree until a four year oversight period has expired." In September 1998 the court ruled for the plaintiffs that for 18 months the Library engaged in a pattern of delay and obstruction with respect to complying with several important non-monetary provisions of the settlement agreement. In March 1999 the Court ordered the parties to engage in negotiations. An amended settlement agreement was reached in December 2000. In January 2001 the parties agreed and the court adopted a new selection process described in the Amended Appendix B (to the settlement) to be used by the Library and was to be fully implemented no later than 1 March 2001.

The January 2001 Amended Appendix B portion of the settlement agreement requires the Library to have a content-valid automated hiring system. The Amended Appendix B covers professional, administrative, and supervisory technical positions and eliminates minimum qualifications; time-in-grade requirements; and written knowledge, skills, and abilities (KSAs) to determine whether applicants meet required qualifications. The Amended Appendix B significantly changes the Library's position management process, which involves the structuring of positions, functions, and organizations in a manner that optimizes productivity, efficiency, and organizational effectiveness.

In August 1999 the Library's Hiring Improvement Process (HIP) team, under the Human Resources 21 (HR21) Steering Committee, recommended the Library automate the hiring process. HR21 is a human resources reengineering project managed by the HR21 Steering

Committee. The HR21 Steering Committee was established by the Library's Executive Committee (EC) to oversee the entire project and ensure that the overall human resources transformation achieves outlined goals and objectives. The HR21 Steering Committee consists of managers from service units. The HIP team is a subcommittee of the HR21 Steering Committee and is chartered to: identify opportunities to improve the hiring process, focus on removing barriers that prevent maximizing the use of existing infrastructure, and recommend options based on desired performance targets and critical success factors.

The HIP team reviewed four products: Resumix, HR Manager, Quick Hire, and ADS. HRS gave the EC an overview of ADS and recommended the Library purchase the service based on the limited time to implement the automated system requirements of the Amended Appendix B. The EC approved the purchase of ADS in September 2000.

OBJECTIVES, SCOPE, AND METHODOLOGY

As the Librarian requested on 30 July 2001, we conducted a programmatic audit of the ADS and Amended Appendix B implementation process. Our review included an evaluation of the current implementation efforts by HRS, AT, and Library staff. Further, the review included the current ADS contract. Our specific objectives included:

- Determining the effectiveness of the Library's project management processes;
- Verifying that the system development process included defining user requirements, processing system change requests, and documenting and preparing system tests consistent with Library regulations and industry best practices;
- Determining the appropriateness of existing AT contract terms; and
- Verifying that the contracting process including the development of the statement of work, evaluations of vendor proposals, evaluation of cost benefit and technical analyses, and the vendor selection process, was consistent with Library and federal regulations.

The scope of our review included evaluating activities associated with the implementation of the Amended Appendix B and ADS. We did not evaluate whether the Amended Appendix B supported the Library's mission. We focused on activities during FY 2001 prior to the appointment of a project manager. We conducted our fieldwork from August to November 2001. Specific audit steps included:

- Reviewing the business case analysis (BCA) prepared by HRS;
- Reviewing EC and HR 21 meeting minutes;
- Interviewing Library staff involved with the Amended Appendix B and ADS implementation including representatives from the Office of the General Counsel (OGC), Library Services, Strategic Initiatives, Congressional Research Service, Copyright Office, Law Library, Information Technology Services, HRS, the Library's Contracting Officer, and the COTR;
- Reviewing written procedures and ADS and HRS instructions;

- Performing on-line tests of the ADS classification and system administration functions;
- Reviewing the system change request and "Help Desk" processes;
- Obtaining ADS end-user comments;
- Reviewing the ADS Implementation Guide;
- Evaluating existing contract terms including contract pricing;
- Evaluating the source selection process;
- Interviewing representatives from outside vendors including AT and Kelly Anderson & Associates (KA); and
- Interviewing representatives of other federal agencies that implemented ADS.

We evaluated Library written procedures and actual practices against criteria documented in Library of Congress regulations (LCR), General Accounting Office (GAO) guidance, and industry standards and best business practices maintained by the Information System Audit and Control Association (ISACA). Specific criteria used to evaluate audit evidence included:

- LCR1614-2, Acquisition of Supplies and Services;
- LCR 212-2, Functions and Organization of Information Technology Services, Office of the Librarian;
- Contracts Services instruction No. 99-03, Contract Review Board Procedures;
- Financial Services Directorate (FSD) Directive 01-01, Cost and Benefits Alternatives Analysis for Planning, Programming, and Budgeting of Large Capital Assets;
- GAO *Standards for Internal Control in the Federal Government* (GAO/AIMD-00-21.3.1), November 1999;
- GAO Guide for Evaluating Federal Agencies' IT Investment Decision-making (GAO/AIMD-10.1.13), February 1997;
- Federal Acquisition Regulations (FAR) 15.3 Source Selection; and
- ISACA Control Objectives for Information Technology (CobIT), July 2000.

FINDINGS AND RECOMMENDATIONS

While implementation of the Amended Appendix B hiring process and ADS has been difficult, the Library has been able to post and close a number of vacancy announcements as shown in Table 1. From May to September 2001, 94 vacancies were posted with an average of 65 applicants per announcement. Although the Library required the use of ADS to post vacancy announcements beginning 1 March 2001, service units did not begin posting vacancy announcements under ADS until May 2001 because of the number of vacancies already in progress under the old selection process. If the vacancies under the old selection process were not completed by 1 June 2001, the vacancies were canceled and re-posted under ADS. In FY 2001, 128 positions were filled using the old selection process and 25 using ADS and the new hiring process for a total of 153 positions.

Table 2 shows progress is also being made in certifying position descriptions. HRS certified a significant number of positions in August as part of a concerted effort to begin filling the 120 positions targeted for the AT support services contract including permanent positions appropriated for the National Digital Library in FY 2001. The 54 position descriptions certified in August can be used throughout the year and include common Library positions such as Librarian, Supervisory Librarian, Copyright Specialist, and Supervisory Copyright Specialist. Because of the ability to use the common position descriptions to post multiple vacancy announcements, the need to create new position descriptions should decline or level out over time and will only require annual re-certifications.

Vacancy Summary Statistics (As of September 30)					
Vacancy Status	Quantity Posted	Average Number of Applicants			
Canceled	18	12.00			
Closed	66	77.62			
Currently Open	10	78.80			
Total	94	6,127			
Overall Average		65.18			

Source: Avue Technologies

Table 1

Although the Library has progressed since 1 March 2001, there is a significant backlog of job vacancies to fill. In December 2001 the Library requested authorization from Congress to realign \$14.8 million in FY 2002 funding from salaries and benefits to other contractual services to hire contractors to compensate for the hiring backlog. To help the Library strengthen its hiring capability and efficiency, several project management issues need to be addressed. The Library needs to develop and deploy a Library-wide project management framework to guide

Position Descriptions Certified by Month Through October 25, 2001

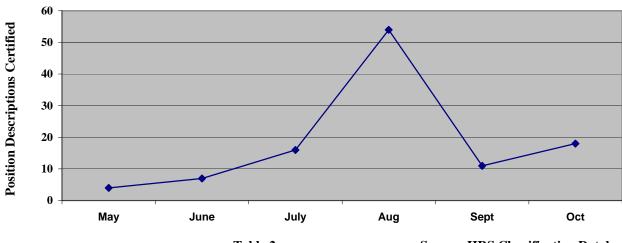


Table 2 Source: HRS Classification Database

the Project Manager in overseeing implementation. The Library should use project management tools and planning concepts to identify and resolve implementation constraints including technical, operability, internal coordination, direction, and role definition issues. To assist in identifying and resolving implementation constraints, the Library should develop a project master plan, test plan, training plan, and quality assurance plan.

The Library needs to develop short- and long-term contractual strategies to ensure that the Library's data rights are protected, and that hiring capability is uninterrupted. Specifically, the Library should negotiate contracts with the assistance of operations experts, OGC, and Contracts Services. Also, the Library should evaluate the need for continuing support services to assist in announcing and filling vacancies, and decide when unused modules will be implemented. Further, the Library should base all decisions on analyses of cost and benefits.

The EC should base all project approvals on supportable information. The Project Manager should immediately develop a post-implementation review plan to determine if the Library's hiring needs are being met, develop a contingency plan for posting and filling vacancy announcements, and if needed, evaluate alternate systems and modifications of the hiring process. The Project Manager should present the results of the post-implementation analysis to the EC and the EC should decide whether to continue use of ADS or open the Library's requirements to competition.

The Library also needs to issue detailed operating procedures as soon as possible to document the roles and responsibilities of the individuals participating in the hiring process and provide specific guidance on hiring procedures. The Library should consolidate its "Help Desk" function for all ADS and hiring questions to ensure that service units are receiving consistent

and timely answers to questions. Finally, the COTR should follow the established AT system change request process to initiate modifications to ADS.

I. Establish a Project Management Framework and Apply to the Current ADS and Amended Appendix B Hiring Process

The Library does not employ a structured project management framework for its reengineering and automation initiatives. In the absence of a framework, critical project planning and monitoring tools to aid in implementation are not being used. Project management deficiencies described in subsections A through F below and ADS system glitches have resulted in frustrated users and delayed hiring.

Detailed project management guidance is found in GAO's *Guide for Evaluating Federal Agencies' IT Investment Decision-making* (GAO/AIMD-10.1.13), February 1997, and ISACA's *Control Objectives for Information and Related Technology* (CobIT). Both guidelines encourage documentation and use of project management techniques including:

- A. Assigning a project manager;
- B. Clearly defining the project and assigning responsibilities, authorities, and roles for the project team including designating user and management representatives to approve the work accomplished in each phase of a project before work on the next phase begins;
- C. Designing appropriate project plans including a project master plan containing statements of scope, objectives, required resources, and responsibilities; a quality assurance plan; a test plan; and a training plan;
- D. Ensuring user participation in defining requirements;
- E. Obtaining project approval from senior management; and
- F. Developing a plan for a post-implementation review to ascertain whether the project has delivered the planned benefits.

Recommendation

The EC should direct the Project Manager to develop a project management framework for the reengineering of the hiring process and use the framework as a pilot for a Library-wide project management framework. The project management framework should include all of the necessary elements as specified in GAO and ISACA guidance to ensure timely and successful completion of all Library-wide administrative projects. The framework should be documented by 31 March 2002 and incorporated into a Library of Congress Regulation by 31 December 2002.

Library Response and OIG Comments

HRS responded that it used an established project management framework to develop the ADS implementation plan. Specifically, HRS stated that it established a project team that met

frequently to revise and enhance its implementation plan and provided a copy of the plan. The Project Manager does not believe that adherence to a project management framework would have prevented many of the problems encountered during the ADS implementation. The Project Manager asserts that the gap between what the library expected from ADS and what the system is designed to do would not have been resolved. The Project Manager contends that only someone trained in gathering product requirements could have foreseen this gap. CRS generally agreed with our recommendation but suggested that a framework be piloted before Library-wide implementation.

We reaffirm our recommendation. It was not until after ADS was purchased that HRS developed an implementation plan and attempted to use certain components of a project management framework. HRS' plan did not include several important aspects of project management such as defining requirements; analyzing costs, benefits, and alternatives; and establishing realistic implementation schedules. These critical steps need to be addressed before procuring systems. While we agree with the Project Manager that having a structured framework may not have guaranteed success, a framework would have helped in earlier identification and resolution of problems. We agree with CRS' suggested pilot implementation strategy and added it to the recommendation.

A. Assign a Project Manager

The Library did not assign a permanent Project Manager to the implementation effort, resulting in confusion as to who had the authority to ultimately make decisions regarding the reengineering of the position management process, which included the implementation of the Amended Appendix B and the deployment of the automated ADS system. The absence of a formally designated project manager with defined authorities and responsibilities contributed to implementation delays.

At various times, different individuals acted as the project manager, including the COTR. Interviews with Library staff indicated they were unaware of any project manager being officially assigned but assumed that the COTR was acting as a project manager. However, the COTR was not equipped to control implementation, lacking the appropriate written authority to allocate resources, issue policy, and reengineer business processes. In addition, the COTR had no formal training in project management and no practical experience in using project management tools, such as performance indicators, to control workflow and identify and report information to management. Finally, the COTR was only initially dedicated full time to the project and did not have the authority to dedicate needed additional resources.

The Library did not identify, monitor, and report performance indicators to identify problems, project status, and performance. The Library planned business process reengineering on an ad hoc basis through a series of questions and responses to process problems. Resolving implementation issues took considerable time as the Library did not document and sometimes did not address internal user questions, concerns, and implementation problems, causing delays

in implementing the new hiring process and ADS. Currently only a limited number of people within the Library have sufficient knowledge of ADS to respond to user questions. In addition, the Library had to complete vacancy announcements in progress by 1 June 2001. In an effort to get job vacancies filled under the old process, Library users flooded HRS with vacancy announcements. As a result, posting and filling vacancy announcements has been slow and the Library expended an additional \$500,000 for two contracts to assist managers in using the new process and executing the Library's FY 2001 personnel budget.

GAO's Guide for Evaluating Federal Agencies' IT Investment Decision-making (GAO/AIMD-10.1.13), February 1997, recommends that a project manager be actively involved in on-going project reviews and be responsible for making decisions about whether to continue, accelerate, modify, or cancel a project. When briefing the EC on the preliminary results during our fieldwork, we recommended that the Library formally designate a project manager and clearly define authorities and responsibilities. Suggested elements of a project manager designation letter were provided earlier to the Deputy Librarian. The EC assigned a project manager on 9 October 2001.

Recommendations

- 1. The Project Manager should be actively involved in project reviews. The Project Manager should immediately review current resource requirements and dedicate additional resources as necessary to ensure successful completion of the project including consideration of additional contract support services.
- 2. The Library should take steps to ensure that a project manager possessing the requisite skills and/or training is assigned to all future projects. This requirement should be incorporated into the Library of Congress Regulation recommended in Finding I.

Library Response and OIG Comments

HRS asserts that the Integrated Library System (ILS) Project Manager was assigned to manage the ADS rollout and provided copies of HRS e-mail requesting the assignment. OGC stated that the HRS Director was assigned as the project manager. CRS endorsed the recommendations.

Our interviews disclosed that there was no one individual assigned to be the project manager. Review of the HRS documentation disclosed that discussions took place about assigning the ILS Project Manager to the ADS project. However, there was no evidence that this individual was assigned. An interview with the ILS Project Manager noted that she did not consider herself assigned to the role. Service units thought the project manager was either the HRS Director or the COTR. Others did not believe a project manager was assigned. It was only after ADS was purchased that the Library considered assigning a project manager.

B. Clearly Define the Project and Team Member Roles and Responsibilities

The Library did not clearly define the project and project team member roles and responsibilities contributing to misunderstandings about the Library's new position management process. Since ADS was considered a subscription service rather than a software development project, the Library did not establish a formal project management framework. The Library should have identified the project as a reengineering effort because the Amended Appendix B significantly changed human resources operations. The new process transformed the way in which position descriptions are created, how vacancy announcements are developed and posted, and how interview questions are derived and asked. The new process also requires that managers create position descriptions whereas previously service unit administrative staff and/or managers created these documents.

The Library created "Drive Teams," composed of service unit representatives to develop system requirements and obtain end-user input. The Drive Teams were organized into ADS functional areas including classification, staffing, workforce management, communications, and training. The training provided to Drive Team members, "Creating Position Documents using the ADS Classification Module," included service unit administrative staff. However, when the teams were defining requirements and receiving training, administrative staff roles had not been clearly defined. In most service units, only administrative staff received the training.

On 28 June 2001 the Deputy Librarian issued a memorandum restricting administrative staff involvement in preparing position descriptions and performing job analyses. Library managers found themselves responsible for functions they were not trained to perform and did not receive the necessary training. Due to confusion as to the roles and responsibilities of both team members and administrative staff and the lack of training, the Library could not efficiently create position descriptions and post or fill vacancy announcements.

Best industry practices suggest that an organization's project management framework provide clear written statements defining the nature and scope of every project before work begins, and that participants' roles be clearly defined. By documenting project objectives and team member roles and responsibilities, the Library can ensure that team members can perform their functions efficiently.

Recommendations

- 1. The Project Manager should redefine the ADS implementation project as a reengineering of the hiring process incorporating the Amended Appendix B requirements through the implementation of ADS.
- 2. The EC, through the Project Manager, should clearly define Library-wide projects, providing clear written detailed statements describing the objectives and scope before work begins. The project definitions should identify team members, skills required for staff members

assigned to the project, and authorities and responsibilities of the project team members. The Library should incorporate these criteria into the Library of Congress Regulation recommended in Finding I.

Library Response and OIG Comments

HRS believes that it established a project team and in consultation with AT, the project team defined the Drive Teams and the number and composition of the participants. HRS intended to train all supervisors and managers in building position descriptions through the Classification module. Several service units subsequently decided that only administrative staff would receive this training and would then be responsible for guiding managers and supervisors. CRS concurred with our recommendation but suggested that there be two recommendations: one dealing with the present project and one dealing with future projects.

HRS addresses obtaining user input through the Drive Teams after ADS was selected. The HRS response does not recognize that user requirements and input should have been solicited before ADS was selected and before implementation began. The HRS response does not address the issue of confusion about Drive Team roles. HRS' perception of roles and responsibilities may have been clear, but the Drive Team members were confused and most participants interviewed described Drive Teams as marginally productive. We concur with CRS' comment and have incorporated its suggestion into the recommendation in Funding I.

C. Develop and Deploy Project Plans

The Library did not prepare project management plans to identify resource requirements or monitor progress. Project management plans include: (1) a project master plan to identify required resources, implementation phases, and project management tools; (2) a quality assurance plan to provide for early detection of significant system and process problems; (3) a test plan to validate that new systems operate on existing hardware and software architectures; and (4) a training plan to identify the extent of user training needs.

Several service unit managers indicated that they were not aware of any specific master plan for transitioning to the new hiring process and system. One of the common comments disclosed during our interviews was that managers did not see a difference between the implementation of the Amended Appendix B hiring process and implementation of ADS. By not making this distinction, the Library was not able to clearly identify process concerns from the automated system problems. Users were attributing their concerns related to how the Library was creating and posting vacancy announcements to ADS, when their concerns were with negotiated Appendix B requirements and interpretations of the appendix into undocumented policies and procedures. As a result, users lacked confidence in the process and ADS implementation.

A quality assurance plan would have addressed the service unit administrative staff and contractor role in the reengineered hiring process. Service unit administrative staff currently

have access only to the ADS Classification module. This module allows creation of position descriptions on-line. However, in most service units, administrative staff have historically reviewed the vacancy announcement and assisted the managers in modifying the KSAs within the announcements. The current process denies the administrative staff access to the Staffing module, which controls the creation of the vacancy announcement and KSAs. Library management has only recently identified the specific access levels to be granted to administrative staff.

The Library initially used the "AVUE Digital Services Implementation Guide" to help identify and assign various roles within the organization. The implementation guide provides generic guidance for a centralized HRS function; however, it does not take into account the unique needs of the Library. A quality assurance plan could have detected and corrected this situation much earlier than the approximate 11 months it took under the existing process.

A documented test plan would have ensured that the data to be validated was available, and that each employee participating in validation tests had an adequate workstation. Interviews disclosed that when CRS was ready to test the content of the ADS database and validate the accuracy of job duties, no data was available. Apparently data that was input by an AT employee for CRS could not be found in the system. To complicate matters, not all of the managers participating in the test had adequate equipment such as a personal computer or the proper Web browser.

Instead of a formal training plan to identify Library-specific training needs and the appropriate level of training, the Library used the vendor's generic implementation guide training matrix to determine who should attend ADS training. Service unit administrative staff were trained in creating position documents in ADS. However, the ADS training matrix did not identify the need to train Library managers on critical position classification tasks, such as factor evaluation system guides, grade controlling language, and percentage distribution for major tasks. Without this training, Library managers were not adequately prepared to perform the detailed classification tasks they were assigned.

The absence of plans contributed to delayed implementation of the new hiring process and ADS. In order to meet the Library's hiring goals, \$500,000 was spent for additional services to help populate the ADS database and support the hiring process. CobIT's best industry practices recommends that project management plans be developed to help monitor the status of projects, identify system requirements, and identify training requirements. Use of project management tools helps ensure that critical issues are identified and resolved and projects are completed efficiently.

Recommendation

The Project Manager should ensure that project master, quality assurance, test, and training plans are developed as soon as possible.

Library Response and OIG Comments

HRS responded that it prepared a project master plan and provided its Project Implementation Plan as evidence. HRS also responded that it did not envision administrative staff having a role in the new process and therefore did not need administrative staff participation in the process. Further, HRS does not understand CRS' comment on the unavailability of content data during testing. HRS contends CRS confirmed that all its positions were in the ADS database. CRS endorsed the recommendation.

The Associate Librarian for Strategic Initiatives suggests another contributing factor to delays: "Interpretation of what is allowable in implementing AVUE is a moving target in the context of Amended Appendix B requirements. HRS relies on OGC and a part-time legal consultant to make day-to-day determinations on specific actions. The legal ramifications, interpretation of specific steps and procedures, are being addressed on an "as you go" basis. The consequence is costly delays, inconsistencies on how to handle the various postings, and confusion among the customers/hiring managers."

HRS' Project Implementation Plan does not include important elements found in a project master plan. The plan provides general references to system implementation issues, but does not address process reengineering responsibilities such as the role of Drive Teams and Library users. It is an implementation plan, and therefore, one component of an overall master plan. As mentioned earlier in the report, the implementation plan was created after ADS was purchased. Typically, project plans are created before systems are selected so that schedules, staffing needs, quality assurance mechanisms, and training needs can be considered and factored into an agency's requirements and used as criteria for selecting a system or service.

A quality assurance plan could have helped identify misunderstandings about administrative staff roles earlier. Additionally, while CRS' data now resides in the ADS database, it was not available when CRS was initially asked to test the validity of the data. Formal test plans could have ensured that data was available before testing began.

D. Involve Primary Users and Technical Experts in Requirements Definition and Implementation

The Library did not involve users and technical experts to the extent needed to thoroughly define the Library's requirements to implement the Amended Appendix B and to automate the classification and staffing functions. The HIP team recommended automating the hiring process and reviewed four products. HRS selected ADS because it believed it was the easiest to use and content-valid, a requirement of Appendix B. However, there were many initial technical problems with ADS and users lost confidence in the system, contributing to delayed vacancy announcement postings.

Because ADS was defined as a subscription service, Information Technology Services (ITS) was not involved as a technical expert in evaluating the ability of ADS to meet the Library's needs. Interviews with ITS personnel involved in the implementation of ADS stated their involvement was primarily as a user not a technical specialist. The Library conducted limited testing on system content and capacity. Had ITS participated more in the process, it could have conducted more rigorous tests of the system on the Library's current hardware and software architecture. Because ADS was not thoroughly tested, initial users encountered a series of technical problems ranging from having the wrong version of a Web browser to being disconnected from the AT server hosting ADS. Even if ITS had been more involved in the process, the Library's brief implementation schedule did not allow sufficient time for testing, evaluating test results, and correcting any ADS technical problems.

LCR 212-2, Functions and Organization of Information Technology Services, Office of the Librarian, defines a major role of the ITS Director as the principal advisor to the Librarian, the Deputy Librarian, and the Chief of Staff. As such, the ITS Director should be a primary team member on all information technology-related projects that are intrinsic to the work of the Congress, and the Library's staff and patrons. ITS has multiple systems development groups, each of which performs enterprise analysis, requirements analysis and project definition, detailed systems analysis and design, software development and testing, and contractual work as it is applied to individual projects in support of Library functions and procedures, regardless of programming languages or project scope. Employing ITS could have identified the testing and implementation problems and resulted in more timely resolution of issues and filling of Library vacancies.

Recommendations

- 1. The Project Manager should ensure that primary users are involved in requirements definition and implementation.
- 2. The Project Manager should ensure that ITS is involved in any future automation-related HRS projects. ITS should be involved in developing systems requirements and testing the compatibility of any new systems with the existing hardware and software architecture. Further, ITS should be included in any future contract negotiations to provide technical advice.

Library Response and OIG Comments

The Project Manager responded that ITS should not be the organization fulfilling the role of developing system requirements and negotiating contracts. HRS responded that ITS was briefed and involved during the implementation of ADS including involvement in the HR21 Steering Committee and briefings and discussions about automation support roles and ADS usability. OGC states that the decision to proceed with implementation was made by the EC and HRS with the knowledge that absent the court imposed time constraint additional time would have been

taken for testing and correcting ADS technical problems. CRS suggested that we also recommend that primary users be involved in requirements definition and implementation.

We reaffirm our original recommendation but have added the recommendation to include primary users in requirements definition and implementation as CRS suggested. We believe that the Project Manager misinterpreted our recommendation. We did not suggest that ITS solely determine requirements or negotiate contracts, but rather, that it be involved as an integral team member.

The briefings in which ITS participated occurred after ADS was procured, adding little value to the critical task of evaluating vendor alternatives and determining implementation risk based on the modifications needed by the Library to meet its needs. Even with the time constraints imposed by the settlement agreement, ITS and other user participation could have significantly improved implementation progress, user acceptance, and the overall efficiency of the Library's hiring process.

E. Clearly Document Executive Committee Project Approval

The EC's understanding and approval of the implementation of ADS was not clearly documented. Although EC meeting minutes of 5 September 2000 document that purchase of the ADS subscription was approved, there is no documentation stating the basis for the approval.

Interviews with EC members or their designated representatives indicate that they do not recall approving the implementation of ADS. They recall being presented with an ADS business case analysis. However, as discussed in Finding VI on page 30, the analysis was not supported with factual information. Managers were also unaware that implementing ADS would significantly change the Library's current position management process and that the Amended Appendix B required this process change. The process change required significant changes in how managers develop position descriptions and post vacancy announcements.

Traditionally, service unit administrative staff and/or managers prepared position descriptions, vacancy announcements, and had final approval over staffing tasks such as preparing and analyzing KSAs. The new process virtually eliminated administrative staff participation by requiring managers to create position descriptions and centralizing the staffing function in HRS. Service unit managers thought that position descriptions would be provided to AT for input into ADS. The Amended Appendix B stated that the Library's current position descriptions would be transferred to the new database. No one appeared to know that only the position duties, not the complete position descriptions, would be included in the ADS database, and virtually all of the duties would have to be rewritten. Senior management did not embrace the additional burden of managers being required to be knowledgeable in position classification concepts and having to personally search and select the job tasks required for the position. For most service units, administative staff and/or managers performed these tasks. These tasks have consumed much more time than anticipated by users.

Best industry practices require that senior management's understanding and approval of a project be clearly documented. This can be done in the form of meeting minutes or approval documents used to establish project objectives and assign staffing resources. This documentation ensures that management fully understands the project scope and resources required for successful completion.

Recommendation

We recommend that the EC document approval of all projects significantly impacting Library-wide administrative functions. This approval should describe the basis for the approval (e.g. cost and benefits analysis) and the EC's understanding of the project scope and objectives. Further, we recommend that the EC consider obtaining assistance from the OIG to validate the information it relies on to make important program decisions.

Library Response and OIG Comments

HRS responded that it is inaccurate to suggest that the EC was unaware of the substantive changes required under Amended Appendix B. HRS states that the EC was briefed on these changes and refers to the language from the Cook Case settlement report. CRS requested clarification of the meaning of senior management and questioned the need to have the OIG review information relied on to make important program decisions.

We reaffirm our recommendation but have modified the language based on CRS' comments. The EC was not aware of the extent of changes in implementing the new hiring process and system. As stated in our finding, the misconception as written in Amended Appendix B was that "The automated system will have in its database the Library's position descriptions and job analyses." Virtually none of the Library's existing position descriptions and job analyses were usable. HRS provided AT with approximately 3,200 position descriptions for current jobs. However, most of these position descriptions dated back to 1985 and/or contained performance standards rather than duties. As a result, most of the position descriptions provided by HRS had to be completely redefined before vacancy announcements could be posted. This included establishing new position descriptions, performing the corresponding job analyses, and creating selection documents such as applicant questionnaires and KSAs. This unanticipated work has consumed an enormous amount of Library managers' time.

We changed the term "senior management" to "Executive Committee." We also changed the recommendation to make the OIG available to the EC for analysis of information rather than suggesting our office validate all information the EC relies on to make decisions.

F. Develop and Execute a Post-Implementation Review Plan

The Library has not developed and executed a post-implementation review plan because ADS was described as a subscription service and not thoroughly reviewed by ITS. A post-

implementation review plan includes key performance indicators such as time and cost, and describes criteria for a "go/no-go" decision process. The plan should include determining if the Amended Appendix B requirements as interpreted and implemented meet the Library's hiring needs and if not, whether the process can be improved. Without a post-implementation review plan, it will be difficult for the Library to determine whether the Amended Appendix B and ADS implementation was successful, whether projected benefits were achieved, and whether the Library should continue with ADS.

Interviews with key Cook Case advisors indicated that failure of the ADS implementation was not considered. Accordingly, contingencies and options were not considered and the Library may be vulnerable to additional service delays or interruptions if contingencies and options are not formally evaluated.

CobIT best industry practices suggest that a project management framework provide, as an integral part of the project team's activities, for the development of a plan for a post-implementation review of every new or modified information system to ascertain whether the project has delivered the planned benefits. By developing a detailed plan, including metrics to measure progress and implementation effectiveness, the project manager can develop a position on the effectiveness of the system. The Project Manager should share the results of the post-implementation analysis with the EC so a decision can be made about continuing the use of ADS or formally opening the Library's requirements to competition.

Recommendations

The Project Manager should immediately develop a post-implementation review plan to include:

- 1. Analyzing the Library's new hiring process and system to determine if the Library's hiring needs are being met. This analysis should include reviewing HRS' detailed operating procedures to determine whether the procedures sufficiently support the implementation of Appendix B, and a review of ADS to determine if the system sufficiently meets requirements outlined in the procedures. A sample of positions should be tracked through the hiring process and ADS from the creation of the position description to selecting candidates, and supplemented with interviews. The sample should include examples considered by Library managers as anomalies. In developing the post-implementation plan, the Project Manager should take care to distinguish ADS systems issues from issues related to the Library's reengineered hiring process or the requirements of the Amended Appendix B. This evaluation should be completed by 19 December 2001.
- 2. Developing a contingency plan for posting and filling vacancy announcements to ensure the Library can continue its mission. This should be accomplished by 22 January 2002.
- 3. Evaluating alternative systems and alternate or modified processes if the post-implementation review indicates that ADS or the new hiring process are not meeting the Library's needs.

4. Detailed operating procedures (as recommended in Finding II below) should be used to analyze specific automated system needs. This analysis should be completed by 22 January 2002.

Library Response and OIG Comments

HRS responded that it prepared a post-implementation review plan and provided the document for our review. The Project Manager stated a plan will be developed and a post-implementation review conducted, but that it would not be completed until 1 April 2002. CRS endorsed the recommendations.

We reviewed the HRS plan, which consisted of several briefing slides. The slides represent a proposed format, not an actual plan. HRS may have considered a post-implementation review, but did not develop a formal plan or initiate a review. Performance metrics are mentioned in HRS' plan, but there is no evidence that performance metrics were or are being tracked. The Project Manager's comments are responsive to the recommendation. However, the Project Manager should dedicate sufficient resources to accomplish the post-implementation review plan as soon as possible. By delaying this process, the Library further delays filling vacancies and runs the risk of not having sufficient time to evaluate and contract for alternative solutions, if needed. Finally, we suggest that the Project Manager provide the EC with at least monthly status reports identifying key performance metrics including the status of the ADS implementation, and ADS' success/failure in meeting the Library's requirements.

II. Issue Documented Hiring Procedures

The Library should issue detailed operating procedures that document the new hiring process as soon as possible. HRS' Merit Selection and Promotion Plan, dated 6 June 2001 outlines high level procedures to implement Amended Appendix B, however, there are no detailed procedures that explain how the hiring process works using ADS or the roles of the administrative staff.

The absence of detailed operating procedures results in users making mistakes and having to ask questions about the process. Further, the lack of written procedures and resulting misunderstanding of roles and responsibilities between various Library service unit administrative staff, OGC, and HRS has also prevented the new hiring process and ADS from being fully embraced and implemented. Service unit administrative staff currently have access only to the ADS Classification module. This module allows the administrative staff to create position descriptions. However, administrative staff have historically been involved in reviewing the vacancy announcements and modifying the KSAs within the announcements. The current process denies the administrative staff access to the Staffing module, which controls the creation of the vacancy announcements and KSAs. This change in administrative staff roles was not clearly communicated to the service units and has only recently been defined. Documenting the process initially could have brought this issue to management's attention sooner so that the issue could have been resolved early in the implementation process.

The Standards for Internal Controls in the Federal Government (GAO/AIMD-00-21.3.1) states: "Internal controls and all transactions and other significant events need to be clearly documented, and the documentation should be readily available for examination. The documentation should appear in management directives, administrative policies, or operating manuals and may be in paper or electronic form. All documentation and records should be properly managed and maintained."

The GAO guidance also recommends that an agency clearly define key areas of authority and responsibility for operating activities, reporting relationships, and authorization protocols. For example, Library procedures should document in detail the responsibilities and authority of the participants in the hiring process such as HRS staff, SMEs, and the service unit administrative staff.

Recommendation

HRS should develop detailed operating procedures as soon as possible covering the new hiring process and use of ADS. The procedures should be approved by OGC and delineate HRS staff, SME, manager, and service unit administrative staff functions and explain every step in the position management process including the flow of information and all reviews and approvals. HRS needs to update the standard procedures as actual policies and practices change and communicate the changes to users expeditiously.

Library Response and OIG Comments

HRS responded that the Library of Congress Merit Selection and Promotion Plan dated 6 June 2001 contained detailed operating procedures. The Project Manager concurs with the recommendation and suggests that HRS should be tasked with brokering a master document for "the application parameters and requirements of Appendix B." Once this document is created and approved, the Project Manager suggests that service units create their own supplemental procedures. OGC responded that service units were to document their unique hiring procedures as part of the AT support services contract. Immediately following the AT support services contract, project coordinators were to work towards creating standard operating procedures to be used Library-wide. CRS generally agreed with the recommendation.

The Merit Selection and Promotion Plan is a high-level policy guide for implementing the new selection process under Amended Appendix B. The plan describes the responsibilities of HRS, SMEs, selecting officials, and applicants, and explains each phase of the hiring process including documentation and record keeping. However, the plan does not contain enough detailed information to eliminate the need for users to ask policy and procedural questions on basic functions that managers are to perform, or eliminate confusion among users.

Detailed operating procedures should explain who in HRS could perform system overrides to change applicant scores and when these changes are allowed, how the referral lists are to be

generated, how system changes are communicated to human resources specialists and users, and most importantly, the basic principles for writing job duties, position descriptions, applicant questionnaires, and performing job analysis. The Project Manager's comments are responsive to our recommendation and we suggest that he begin this process with HRS immediately. Further, we suggest that draft procedures and data accumulated under the AT support services contract be reviewed and used to the extent possible to develop the procedures. Amended Appendix B requirements should serve as the basis or outline for the procedures.

III. Centralize and Document the Help Desk

While HRS has established a "Help Desk" to respond to and track applicants' problems, it has not established a similar capability for problems related to internal use of the classification and Staffing modules. Users having questions on the Classification module are referred to the first available HRS employee. There are numerous complaints that applicants and managers are receiving contradictory information in response to a multitude of questions about how to use the ADS and the new hiring process. By not having a centralized database to refer to, the HRS employee may have to research issues that have already been resolved by another employee or provide an answer that contradicts prior answers to similar questions. By documenting user questions in a central location, HRS can establish consistent answers about common procedural or system problems, identify system problems requiring AT intervention, and identify needs for user training and modifications to the detailed operating procedures.

Best industry practices suggest defining and implementing a problem management system to ensure that all operational events which are not part of the standard operation (incidents, problems, and errors) are quickly recorded, analyzed, and resolved. The lack of a comprehensive Help Desk process stems from the absence of a structured project management framework for managing the revised hiring process and ADS implementation. Project management criteria includes the need to identify, document, address, and follow up on all user concerns and to employ tools to control workflow and assign responsibility within HRS for responding to user questions.

Recommendations

- 1. HRS should establish a Help Desk function that documents and tracks internal user questions for all ADS modules. This Help Desk function should be centralized and utilize a spreadsheet or database that is accessible to all HRS staff so that all issues are documented and addressed in one location. Individuals assigned to the Help Desk should have sufficient knowledge and training to provide timely answers. Further, the Help Desk process should be described in the detailed operating procedures.
- 2. The COTR for the ADS contract should chair an ADS users group to discuss and prioritize user problems. The COTR should also provide a listserve to document identified problems, the status of solving the problems, and solutions.

Library Response and OIG Comments

HRS responded that it identified a help strategy in its implementation plan that included a Help Desk for applicants, briefings on the on-line system, and assistance through the Library's Internal University. HRS concurs on the need to document and follow up on user questions and concerns, but believes a listserve or user group would be a better vehicle for addressing user concerns. The Project Manager concurs with the recommendation. However, the Project Manager believes that a Help Desk should be designed and implemented by the project management team. The Project Manager contends that not all potential Help Desk questions could or should be answered by HRS and proposes routing customers and Library employees with questions via a menu driven system to the appropriate person to answer the question, whether they are in HRS, or in another service unit. The Library's Web site was offered as a possible solution. CRS suggests a forum to discuss and track user problems.

The Project Manager's suggestion is responsive to our recommendation. The project management team should begin work on its proposed solution as soon as possible. Further, the proposed solution should take advantage of existing Library Help Desk functions such as those used by ITS. Based on CRS' response, we added the recommendation that the COTR chair an ADS users group to evaluate and resolve user problems.

IV. Use the AT Configuration Change Request Process

HRS is not documenting all ADS change requests in AT's change request system. Although HRS experienced some difficulty with accessing the on-line change request system initially, changes should have been communicated in writing nonetheless. Without this process, there is little assurance that Library requirements are communicated to AT and that needed changes to ADS will be made. This could result in additional delays in ADS implementation.

During our review, HRS used informal discussions with AT in lieu of AT's formal systems change request process to initiate a significant software change. The EC determined that the service unit administrative staff would have update capabilities to the following functions in the ADS Staffing module:

- Draft Vacancy Announcement
- Crediting Plan
- Job Analysis Worksheet
- Applicant Questionnaire
- Interview Questions
- Benchmark Anchors

Currently, ADS does not allow administrative staff this level of access. ADS allows access, including access to applicant specific data, only to employees assigned to the human resources specialist role. ADS requires a software change to support this level of access.

During an ADS Classification and Staffing module training session attended by administrative staff, an AT representative stated that he would submit a system change request to explore the possibility of adding an additional user access role. HRS believed that since the AT representative stated he would submit the requested change, no formal change request was required. Since no formal change request was prepared and submitted to AT, it was not formally tracked and monitored.

On 1 October 2001 the Deputy Librarian issued a memorandum requesting the Acting Head of Contracts to initiate discussions with AT to obtain the necessary changes to ADS. Based on additional discussion with the Acting Head of Contracts, it was decided that HRS would formally request the required change in writing via the AT system change request process. With a written request, AT would be required to formally approve or deny the request. If approved, AT would make the change at no charge to the Library. HRS was contacted and asked to provide a status on the written change request. There still is no written change request in AT's system communicating the required change. Delay in requesting and implementing this change diminishes the usefulness of the administrative staff training because the knowledge learned is not being used, and it impedes progress in the operational use of ADS and the hiring process.

The Standards for Internal Controls in the Federal Government (GAO/AIMD-00-21.3.1) states: "Application system development and maintenance control provides the structure for safely developing new systems and modifying existing systems. Included are documentation requirements; authorizations for undertaking projects; and reviews, testing, and approvals of development and modification activities before placing systems into operation."

Recommendation

We recommend that the Library document administrative staff access level requirements in AT's configuration management system.

Library Response and OIG Comments

HRS acknowledged that it often experienced problems accessing the AT change request system. In order to document requests, however, HRS stated that it consistently utilized e-mail and informed the vendor of requirements and provided a list of system change requests. The Project Manager concurs with the finding and states that HRS should not oversee the change request process. The Project Manager suggests that an individual be tasked with evaluating and prioritizing ADS technical requirements, and a separate individual be assigned to evaluate content-related changes. The Project Manager further stated that HRS does not have sufficient

staff and related skills to perform these functions. CRS generally concurred with the recommendation.

While the AT automated change request system was not fully operational, there is a documented manual process that HRS should have followed. Only by using a documented AT change request process can the Library ensure that its requests will be acknowledged and acted upon by AT. The Project Manager's comments are responsive to the recommendations. Following the Project Manager's recommendation, we suggest that the Library designate separate technical and content representatives to document, prioritize, track, and follow up on required system changes.

V. Negotiate More Favorable Contract Terms and Prices for Future Personnel Subscription Services

The Library's best interests were not served during contract negotiations with AT. For example, the Library purchased a module that was not deployed. The Library did not include clauses in the AT subscription contract to protect the Library's data rights and access. Since the Library did not document the source selection process, we are unable to determine whether the Library chose the contractor who could provide the best value. Also, the Library is possibly paying more for subscription services than needed because it negotiated a higher level of full time equivalent (FTE) service than the maximum number of positions subject to the new hiring process.

A. Negotiate Contracts to Protect the Library's Interests and Represent Best Value

HRS exceeded its authority by conducting negotiations with AT between July 2000 and September 2000 without an authorized contracting officer. There was no evidence that HRS attempted to save money or involve in-house experts, such as ITS, in contract negotiations. Negotiations resulted in the following unfavorable conditions:

- The Library purchased a Workforce Management module in both FY 2001 and FY 2002 for approximately \$82,500 per year after discounts. The workforce module was not deployed in FY 2001, has not been used thus far in FY 2002, and is not scheduled to be used. Certain service units decided not to implement the module until the Classification and Staffing modules were fully operational, therefore, implementation was deferred. Prior to signing the contract, deferral of the Workforce Management module was discussed, but not decided.
- The Library signed an initial purchase on 28 September 2000 for \$46,250 after discounts and excluding the initialization fees, for a one month subscription. However, 28 September 2000 was a Thursday and the following day represented the only remaining day in the fiscal year that the contractor could have worked at the Library. Moreover, the

- Library received little benefit from the subscription service, which was not available
 during September 2000. The second contract took effect on 1 October 2000 and the full
 year subscription prices were paid. HRS stated that awarding the contract in FY 2000
 was necessary to obtain large vendor discounts. However, we confirmed that similar
 discounts were offered by the vendor in FY 2001.
- On 2 August 2001, the General Services Administration (GSA) signed an additional support services contract with AT on behalf of the Library utilizing labor rates and terms that were included in the Veterans Administration contract. The statement of work was very similar to the one used for the National Digital Library contract issued to Kelly Anderson & Associates (KA) for similar support services. Although AT had greater inherent knowledge of the software, the vendor charged the Library \$136 per labor hour and \$40,800 in airfare and per diem. KA charged \$73 per hour and had no airfare or per diem charges. Because the AT contract contained a restrictive consulting clause, KA did not have direct access to the ADS system and was therefore somewhat limited in its support. The limitation necessitated paying higher fees for AT support services.

The lead HRS representative did not possess the qualified experience in negotiations, contracts, or information technology issues that were essential to represent the Library on this contract. Library officials were led to believe that this was a GSA schedule contract and the Library received a GSA schedule price. The EC was also incorrectly informed that AT was a GSA schedule contractor. Under the schedules program, GSA enters into contracts with commercial firms to provide supplies and services at stated prices for given periods of time. Contracts are placed directly with the schedule contractor. However, this was not a GSA schedule contract and AT is not on the GSA schedule for the subscription service. The GSA contracting officer was merely engaged to sign a task order contract against the Veterans Administration's AT contract on behalf of the Library. Knowledge of AT's actual GSA status should have alerted the Library to the importance and need to negotiate the price for subscription services.

Based on the misinformation about AT's contract status with GSA and the action to sign the contract prior to year-end, the Library's contracting officer did not follow Library contracting policies. Specifically, LCR 1614-2 and Contracts Services instruction 99-03 were not followed for the AT subscription and support services contracts. Even though the contracts with AT took the form of a procurement through GSA, in accordance with LCR 1614-2, the subscription contract required management concurrence with the contracting officer's action or recommendation for an award including option years because it was over \$1 million. Review should have been obtained from OGC; the Head of Contracts; the Deputy Librarian of Congress; and the Librarian of Congress or his designee. The support services contract required only the concurrence of the Head of Contracts and OGC.

Contracts Services instruction No. 99-03 requires that government-wide contracts exceeding \$100,000 be approved by the Library's Contracts Review Board (CRB). Based on the large role played by HRS and its limited contracting experience, a CRB review could have been an

effective mechanism to ensure more favorable terms and include protective clauses. The instruction states, "The CRB shall constitute a management/quality review level...to ensure compliance with prevailing laws, rules, regulations and Library of Congress policies..." On other CRB contract reviews, contracting officers have been directed to seek improved cost and pricing assistance. In this case, the CRB was never presented the contract and therefore never had the opportunity to protect the Library's interests.

Recommendations

- 1. The Library should negotiate contracts with the assistance of technical experts, OGC, the Project Manager, and Contracts Services.
- 2. The COTR should be issued a Letter of Delegation describing the 'authorities and duties' and limitations of the position.
- 3. The Library should decide if and when the Workforce Management and Workers Compensation modules will be implemented. This decision should be made as soon as possible to coincide with the evaluation of current contract services and the new hiring process. If the Library exercises the FY 2003 contract option with AT, and if a decision is reached to delay the implementation beyond the 30 September 2002 expiration of the current option, the Library should negotiate reduced payment for these modules.

Library Response and OIG Comments

HRS responded that the Library had to pay the subscription prior to initialization and that payment of the one month subscription covers each year of the total subscription. HRS also asserts that other agencies do not receive the discounts that the Library obtained and that the KA contract was not for the same services as the AT support services contract. HRS states that it advised the National Digital Library about access restriction to ADS before the KA statement of work was developed. HRS also comments that the HR21 Steering Committee approved the purchase of the Workforce Management module and that it has been tested and is ready to deploy.

The Project Manager states "Effective contract negotiation would require the person to be familiar with the process of vetting such options against other market options and internal build options, the cost of each and the appropriate and accurate balance between systems costs and service costs required for success. This expertise does not currently exist in the Library." CRS concurs with the recommendations.

Our discussions with other agencies disclosed that they were able to negotiate similar discounts in FY 2001. Therefore, the Library obtained no unique advantage by paying the one month subscription fee. HRS' assertions about the KA contract are unsupported. Our comparison of the statements of work for the AT and KA contracts disclosed that they provided virtually the

same services regardless of when it was determined that KA could not access ADS. Finally, HRS' response that the Workforce Management module is ready to deploy does not address the finding. Our concern is that the Library is paying for unused services. The Library should either deploy the services or not incur the charges.

We disagree with the Project Manager's comments. We recommend that individuals with a broad range of skills be involved in the evaluation and negotiation of proposals and contracts. There are individuals within the Library that possess information technology skills, and others that possess contracting skills. The OIG is available to provide financial analysis guidance. With the participation of these skill sets, it is possible to protect the Library's interests.

B. Conduct Legal Sufficiency Reviews Prior to Contract Award

The AT contract includes clauses that are not in the best interest of the Library and omits a standard contract clause addressing source-code access. One clause restricts access to the database to Library employees. The Master Subscription Agreement attachment to the contract states, "Avue Digital Services may be used only by members of the Covered User Community and only for the Subscriber's own internal business purposes..." The covered user community includes only those users who are employees of the subscriber.

There is other language in the contract that is vague about data ownership. For example, it is unclear whether the Library has access to internally created data such as position descriptions. Lastly, the contract does not address source-code rights that would allow the Library access to the source-code in the event that AT discontinues business operations. A source-code clause is normally included in information technology contracts.

The contract language has negatively impacted the Library in a variety of ways. The Library may not have access to the vast database of Library-specific job duties in the event the contract expires, is not renewed, or is terminated, and the source-code may not be available from AT to continue operations if AT were to cease operations. Additionally, the scope of work on the existing KA consulting contract had to be narrowed without a contract price change after it was discovered that KA did not have access to the database. Without an unlikely consultant access waiver from AT, any future HRS consulting or support services contracts will restrict access to the database and therefore limit the value of these contracts.

These clauses were not reviewed for legal sufficiency because Contracts Services did not provide the contract to OGC as required by LCR 1614-2 prior to contract ratification.

Recommendation

We recommend that OGC; the Head of Contracts; the Deputy Librarian of Congress; and the Librarian of Congress or his designee review all contract awards as prescribed in LCR 1614-2.

Library Response And OIG Comments

CRS concurred with our recommendation. None of the other responses addressed this finding.

C. Document Contractor Source Selection Analyses

The Library selected AT as the vendor to automate the Library's hiring process without a formal technical or cost analysis comparing the capabilities of competing vendors. Although HRS received presentations from various vendors prior to contract award, the Library selected AT without use of a documented analysis or rating methodology. The contracting officer and ITS representatives were not materially involved in the analysis or source selection. Additionally, there was no evidence that other government agencies were contacted to provide substantive information regarding AT's past performance. By not formally analyzing the capabilities and past performance of the prospective vendors, the Library may not have selected the vendor offering the best value.

HRS did not believe it was necessary to prepare a detailed analysis because AT was the only vendor capable of complying with the Amended Appendix B and the required 120-day implementation period. Contributing to the lack of an analysis was the exclusion of the contracting officer and ITS from the selection process. Interviews with ITS personnel disclosed that ITS involvement in the implementation process was from a user perspective, not a technical perspective. Further, AT claimed ADS was a subscription service with minimal implementation risk and little modification.

Contracts Services and ITS may have provided valuable assistance to HRS representatives. Contracting officers are trained in source selection procedures, and information technology experts are trained in information technology implementation risks. ITS could have provided insight as to the maturity of the software code and thoroughly tested ADS on the Library's hardware and software platform before a selection was made.

The objective of source selection is to select the proposal that represents the best value. A proposal evaluation should include an assessment of the proposals and the offeror's ability to perform the prospective contract services successfully. FAR 15.305(a) states that an agency shall evaluate competitive proposals and assess their relative qualities solely on the factors specified in the solicitation. The relative strengths, deficiencies, significant weaknesses, and risks supporting proposal evaluation should be documented in the contract file.

HRS did not comply with the following FAR citations:

• 15.303 (a) "The contracting officer is designated as the source selection authority" and, "(b) (6) the source selection authority shall select the source or sources whose proposal is the best value to the Government."

• 15.308 "The source selection decision shall be documented, and the documentation shall include the rationale for any business judgments and tradeoffs made or relied on by the source selection authority, including benefits associated with additional costs."

The exclusion of the contracting officer from the source selection process is also contrary to *The Standards for Internal Control in the Federal Government* (GAO/AIMD-00-21.3.1) requiring separation of duties. The lack of separation was created when HRS, in its capacity as the COTR, also performed the duties of the contracting officer. Without a trained contracting officer, effective checks and balances did not exist and increased the risk that undetected errors, irregularities, or wrongful acts could occur.

Recommendation

A Library contracting officer must make all future Library source selection decisions with the assistance of the service units and other specialists, as needed. For example, ITS should be consulted if the acquisition involves information technology.

Library Response and OIG Comments

HRS replied that AT was the only vendor that could meet the needs of the Library and therefore was a sole-source provider. HRS contends that the OIG was not privy to the Cook Case negotiations, which mandated a specific functionality, and that ITS, the Library's contracting officer, and other users were involved in the process. HRS further states that it made every effort to obtain the best value for the Library. CRS concurred with the recommendation.

We commend HRS for its efforts to obtain best value for the Library, however, HRS comments are not responsive to the finding and recommendation. While the settlement agreement defined some functionality of the system, the agreement did not specify which vendor to select. Further, even in a sole-source selection, the basis for the selection must be documented and only individuals with sufficient contracting knowledge should be performing contracting actions. Finally, user participation, and specifically the technical meetings with ITS did not occur until after AT was selected as the vendor.

D. Purchase Only Necessary FTE Subscription Levels

The Library purchased the subscription service at higher FTE levels than necessary. The Library paid AT at the 3,000 to 5,000 FTE level, however, the 0 to 3,000 FTE level may have been more appropriate because the Library has approximately 2,625 FTEs that are serviced by the ADS system. The technical, clerical, and police positions totaling approximately 1,600 FTEs are processed by other personnel systems and are not included in the Amended Appendix B.

Approximately \$176,000 of savings may have been achieved based on the lower FTE level if negotiations were conducted for FY 2001 and FY 2002 that resulted in the purchase of the lower FTE level. The Library negotiator was not aware that there were different prices for different FTE levels and therefore did not attempt to negotiate more favorable pricing.

The Library's contracting officer assumed the best price was received because he had erroneously been informed by the COTR that AT was on the GSA schedule and the Library obtained the only price offered. The Library may have obtained better prices had Library and Contracts Services policies been followed. LCR 1614-2 requires concurrence with the contracting officer's decisions by Library officials. Contracts Services instruction No. 99-03 provides for a management quality review by the CRB to ensure compliance with prevailing laws, rules, regulations, and Library of Congress policies.

Recommendation

The Contracting Officer should include the lower FTE subscription level in the negotiation strategy if the Library exercises future AT contract options.

Library Response and OIG Comments

CRS concurred with our recommendation. None of the other responses addressed this finding.

VI. Better Support Business Case Analyses

A Business Case Analysis (BCA) is a tool used to summarize the results of a detailed review of cost and benefits of various alternatives to acquiring a capital asset. BCA savings estimates related to the Amended Appendix B hiring process automation presented to the EC on 5 September 2000 were inflated and contained unsupported information.

HRS' BCA projected 1- and 5-year savings, based on efficiency gained in processing individual staffing actions by implementing the AT software. Based on the BCA, we determined the HRS labor savings attributable to the AT implementation were 45 percent and 82 percent of total HRS labor in years 1 and 5 respectively. It is not possible to achieve these labor savings from one aspect of the HRS function. HRS would have to eliminate 82 percent of its staff while performing all other duties to reach this level of savings. The inflated estimates may have influenced the EC's decision to purchase the ADS software.

Financial Services Directorate (FSD) Directive 01-01, "Cost and Benefits Alternatives Analysis for Planning, Programming and Budgeting of Large Capital Assets" was not in effect at the time the BCA was prepared and presented. The directive became effective in the Library's FY 2003 planning, programming, and budgeting cycle. The directive includes an electronic spreadsheet that offers a structured approach for developing and evaluating various options for solving a business process problem and developing an implementation plan for the selected solution.

We were unable to determine why the estimated savings in the BCA were skewed but believe that the time limitation placed on the Library for implementation of Amended Appendix B requirements contributed to the insufficient analysis of cost and benefits.

Recommendation

The Librarian should require that future cost and benefits alternatives analyses be prepared in accordance with FSD Directive 01-01. This directive should be supplemented with additional guidance from GAO, such as calculation of return on investment, payback periods, segregation of cost as recurring or non-recurring, and other specific criteria on preparation and documentation of cost estimates. The Librarian should consider submitting sensitive or high dollar cost and benefits alternatives analyses to the OIG for validation.

Library Response and OIG Comments

HRS responded that the thrust of the BCA was accurate and that reduced cost was not the only argument for proceeding with the ADS procurement. HRS points to other qualitative benefits in its presentation to the EC related to reduced cycle time, improved decision making, and the like as the EC's basis for selecting ADS. Specifically, HRS states that the key point conveyed through the BCA was that the manual hiring process then in place was failing to meet current demand, and could not possibly meet future hiring demands. However, HRS does regret the inclusion of the cost projection slides in its presentation. The Project Manager stated that BCAs in the future should be prepared by personnel familiar with performing this type of analysis. CRS concurred with the recommendation but suggested the recommendation be made to the Librarian rather than the EC.

We agree with HRS that the prior manual hiring process was not meeting the Library's needs and that cycle time should be faster with the new process and system. However, the BCA prepared by HRS should have been supported in terms of quantitative and qualitative costs and benefits. Further, our review of the EC minutes and interviews with members does not support HRS' assertion that the EC mainly relied on the qualitative benefits described by HRS as the basis for selecting ADS. A clearly documented and supported BCA would have given the EC better information to base its decision. The Project Manager's comments are responsive to the finding. Based on CRS' suggestion, we changed the recommendation to indicate the Librarian as the authority for policy on conducting cost and benefits alternatives analyses.

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Consolidated List of Recommendations

I. Establish a Project Management Framework and Apply to the Current ADS and Amended Appendix B Hiring Process. The EC should direct the Project Manager to develop a project management framework for the reengineering of the hiring process and use the framework as a pilot for a Library-wide project management framework. The project management framework should include all of the necessary elements as specified in GAO and ISACA guidance to ensure timely and successful completion of all Library-wide administrative projects. The framework should be documented by 31 March 2002 and incorporated into a Library of Congress Regulation by 31 December 2002. (Pg. 7)

A. Assign a Project Manager

- 1. The Project Manager should be actively involved in project reviews. The Project Manager should immediately review current resource requirements and dedicate additional resources as necessary to ensure successful completion of the project including consideration of additional contract support services. (Pg. 9)
- 2. The Library should take steps to ensure that a project manager possessing the requisite skills and/or training is assigned to all future projects. This requirement should be incorporated into the Library of Congress Regulation recommended in Finding I. (Pg. 9)
- B. Clearly Define the Project and Team Member Roles and Responsibilities
 - 1. The Project Manager should redefine the ADS implementation project as a reengineering of the hiring process incorporating the Amended Appendix B requirements through the implementation of ADS. (Pg. 10)
 - 2. The EC, through the Project Manager, should clearly define Library-wide projects, providing clear written detailed statements describing the objectives and scope before work begins. The project definitions should identify team members, skills required for staff members assigned to the project, and authorities and responsibilities of the project team members. The Library should incorporate these criteria into the Library of Congress Regulation recommended in Finding I. (Pg. 11)
- C. Develop and Deploy Project Plans. The Project Manager should ensure that project master, quality assurance, test, and training plans are developed as soon as possible. (Pg. 12)

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- D. Involve Primary Users and Technical Experts in Requirements Definition and Implementation
 - 1. The Project Manager should ensure that primary users are involved in requirements definition and implementation. (Pg. 14)
 - 2. The Project Manager should ensure that ITS is involved in any future automation-related HRS projects. ITS should be involved in developing system requirements and testing the compatibility of any new systems with the existing hardware and software architecture. Further, ITS should be included in any future contract negotiations to provide technical advice. (Pg. 14)
- E. Clearly Document Executive Committee Project Approval. We recommend that the EC document approval of all projects significantly impacting Library-wide administrative functions. This approval should describe the basis for the approval (e.g. cost and benefits analysis), and the EC's understanding of the project scope and objectives. Further, we recommend that the EC consider obtaining assistance from the OIG to validate the information it relies on to make important program decisions. (Pg. 16)
- F. Develop and Execute a Post-Implementation Review Plan. The Project Manager should immediately develop a post-implementation review plan to include:
 - 1. Analyzing the Library's new hiring process and system to determine if the Library's hiring needs are being met. This analysis should include reviewing HRS' detailed operating procedures to determine whether the procedures sufficiently support the implementation of Appendix B, and a review of ADS to determine if the system sufficiently meets requirements outlined in the procedures. A sample of positions should be tracked through the hiring process and ADS from the creation of the position description to selecting candidates, and supplemented with interviews. The sample should include examples considered by Library managers as anomalies. In developing the post-implementation plan, the Project Manager should take care to distinguish ADS systems issues from issues related to the Library's reengineered hiring process or the requirements of the Amended Appendix B. This evaluation should be completed by 19 December 2001. (Pg. 17)
 - 2. Developing a contingency plan for posting and filling vacancy announcements to ensure the Library can continue its mission. This should be accomplished by 22 January 2002. (Pg. 17)

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- 3. Evaluating alternative systems and alternate or modified processes if the post-implementation review indicates that ADS or the new hiring process are not meeting the Library's needs. Detailed operating procedures (as recommended in Finding II below) should be used to analyze specific automated system needs. This analysis should be completed by 22 January 2002. (Pg. 18)
- II. Issue Documented Hiring Procedures. HRS should develop detailed operating procedures as soon as possible covering the new hiring process and use of ADS. The procedures should be approved by OGC and delineate HRS staff, SME, manager, and service unit administrative staff functions and explain every step in the position management process including the flow of information and all reviews and approvals. HRS needs to update the standard procedures as actual policies and practices change and communicate the changes to users expeditiously. (Pg. 19)

III. Centralize and Document The Help Desk

- 1. HRS should establish a Help Desk function that documents and tracks internal user questions for all ADS modules. This Help Desk function should be centralized and utilize a spreadsheet or database that is accessible to all HRS staff so that all issues are documented and addressed in one location. Individuals assigned to the Help Desk should have sufficient knowledge and training to provide timely answers. Further, the Help Desk process should be described in the detailed operating procedures. (Pg. 20)
- 2. The COTR for the ADS contract should chair an ADS users group to discuss and prioritize user problems. The COTR should also provide a listserve to document identified problems, the status of solving the problems, and solutions. (Pg. 20)
- **IV. Use the AT Configuration Change Request Process.** We recommend that the Library document administrative staff access level requirements in AT's configuration management system. (Pg.22)
- V. Negotiate More Favorable Contract Terms and Prices for Future Personnel Subscription Services.
 - A. Negotiate Contracts to Protect the Library's Interests and Represent Best Value
 - 1. The Library should negotiate contracts with the assistance of technical experts, OGC, the Project Manager, and Contracts Services. (Pg. 25)

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- 2. The COTR should be issued a Letter of Delegation describing the 'authorities and duties' and limitations of the position. (Pg. 25)
- 3. The Library should decide if and when the Workforce Management and Workers Compensation modules will be implemented. This decision should be made as soon as possible to coincide with the evaluation of current contract services and the new hiring process. If the Library exercises the FY 2003 contract option with AT, and if a decision is reached to delay the implementation beyond the 30 September 2002 expiration of the current option, the Library should negotiate reduced payment for these modules. (Pg. 25)
- B. Conduct Legal Sufficiency Reviews Prior to Contract Award. We recommend that OGC; the Head of Contracts; the Deputy Librarian of Congress; and the Librarian of Congress or his designee review all contract awards as prescribed in LCR 1614-2. (Pg. 26)
- C. Document Contractor Source Selection Analyses. A Library contracting officer must make all future Library source selection decisions with the assistance of the service units and other specialists, as needed. For example, ITS should be consulted if the acquisition involves information technology. (Pg. 28)
- D. Purchase Only Necessary FTE Subscription Levels. The Contracting Officer should include the lower FTE subscription level in the negotiation strategy if the Library exercises future AT contract options. (Pg. 29)
- VI. Better Support Business Case Analyses. The Librarian should require that future cost and benefits alternatives analyses be prepared in accordance with FSD Directive 01-01. This directive should be supplemented with additional guidance from GAO, such as calculation of return on investment, payback periods, segregation of cost as recurring or non-recurring, and other specific criteria on preparation and documentation of cost estimates. The Librarian should consider submitting sensitive or high dollar cost and benefits alternatives analyses to the OIG for validation. (Pg. 30)

Appendix B

Acronyms Used in This Report

ADS AVUE Digital Services

AT AVUE Technologies

BCA Business Case Analysis

CobIT Control Objectives for Information Technology

COTR Contracting Officer's Technical Representative

CRB Control Review Board

CRS Congressional Research Service

EC Executive Committee

FAR Federal Acquisition Regulations

FTE Full Time Equivalent

FSD Financial Services Directorate

FY Fiscal Year

GAO General Accounting Office

GSA General Services Administration

HIP Hiring Improvement Process

HRS Human Resources Services

HR21 Human Resources 21 (Steering Committee)

ILS Integrated Library System

ISACA Information System Audit and Control Association

ITS Information Technology Services

KA Kelly Anderson & Associates

KSAs Knowledge, Skills, and Abilities

LCR Library of Congress Regulation

OGC Office of the General Counsel

OIG Office of the Inspector General

SME Subject Matter Expert

Appendix C (Page 1 of 2)

United States Government

Human Resources ServicesDirector for Human Resources

Memorandum

Library of Congress

Date: December 21, 2001

TO : Karl Schornagel

Inspector General

FROM : Teresa A. Smith / willa.

Director for Human Resources

SUBJECT : Draft Audit Report 2001-IT-305

Thank you for providing me with a copy of Draft Audit Report 2001-IT-305, New Hiring Process and System: Project Management and Contracting Improvements Needed. I am very disappointed in this draft report and contend that it misrepresents the Avue implementation effort.

Last month, I gave you detailed responses to each specific finding contained in a previous draft. My voluminous memorandum, which included 25 attachments of supporting documentation, concluded with the following comment:

"For all of the reasons just enumerated, we strongly disagree with your overall conclusions that the Library significantly underestimated the risk and complexity for reengineering and automating the hiring process; could not post and fill vacancy announcements for several months; did not use a project management framework, concepts, or tools to monitor progress; did not issue detailed operating procedures in a timely manner; and did not deal with systemic questions. I am confident that the extensive responses that we have provided will result in a much more balanced and accurate final report."

Following my written response, I also met with you and your staff at length to expand upon the points covered in my memorandum.

Frankly, I was shocked to find that my responses produced, at best, cosmetic changes to your original findings. Your report ignores, for example, HRS' extensive project management activities; the tight, court-mandated time constraints under which we operated; the numerous organizational barriers that we encountered during the implementation process; HRS' diligent efforts to provide the Library an improved selection vehicle; clarifying information that we provided regarding the business case analysis; the active involvement of the contracting officer prior to the issuance of the procurement, and HRS' consistent utilization of e-mail to notify the vendor of the Library's change requests.

Given the very modest changes contained in your most recent draft, I do not believe it to be helpful to provide further comments on the report's findings. HRS nonconcurs with the draft

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cc:	e an HRS response, which we will prepare upon request Librarian of Congress			
	Librarian of Congress Deputy Librarian			

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United States Government Memorandum

Library of Congress Office of the Librarian Planning, Management, and Evaluation Directorate

Date: December 18, 2001December 17, 2001

To: Inspector General's office

From: Appendix B Implementation Team /s/

Subject: General response to the findings in IG's report

In this memo we are responding to the IG report at a macro level. We have produced a separate Memo Addendum which responds specifically to those recommendations in the IG report with tasking implications for the Appendix B Implementation team.

In general, we agree with the IG's assessment of what transpired in the recent implementation of new hiring processes and systems. We also agree with the overarching recommendations in the IG's report. (see below) We do not agree in full with certain specific recommendations in the IG's report, most notable its treatment of the help desk issue, user requirements gathering and the preparation of a post-implementation review report. For a discussion of these issues, please see the Memo Addendum.

While it has not been determined conclusively whether or not the Avue technology suffered systems problems during implementation, it is clear that many of the problems experienced during implementation were not the result of systems failures. It is not a perfect system, nor is the implementation complete. It is certain, however, that many of the problems experienced during implementation and subsequently attributed to Avue as systems failures were in fact due to misapplication and incorrect implementation of the technology. We will, in our post-implementation review document how the system is helping the Library to meet it's Appendix B requirements.

It should be noted that one group of key stakeholders, the service units and their respective roles in the implementation effort to date was noticeably absent. from this report. Additionally the root cause analysis needed to develop an understanding of the organizational structure and cultural context of this project needs to be completed as it resides beyond the scope of the Inspector General's report. This report will be beneficial for the Library in the establishment of future projects, especially the recommendations regarding the establishment of a core and consistent approach to management decision-making, project management and applying principles of contract negotiation for major systems initiatives.

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Project Management Frameworks: While adherence to such a framework is always desirable, it would not likely have prevented many of the problems experienced during the Avue implementation. Even with a flawless project management framework, the Avue implementation would have been undermined by a fundamental misunderstanding that did and would have pervaded the process. This misunderstanding has to do with the gap between what the Library wanted and expected Avue to do and what it is actually designed and sold to do. In other words, the question upfront should have been whether or not Avue was really the right product for the Library of Congress given its unique requirements. Only someone (or a team) specifically trained in gathering product requirements that would take into effect the diverse and convergent needs of the Library's service units and required process and policy changes could have evidenced this gap.

Additionally, while we concur with the Inspector General's recommendation regarding the importance of the Library having expertise present when developing system requirements, testing systems and negotiating contracts, that role should not be filled by ITS as it is currently structured. The expertise required to perform this function is much more process expertise than systems expertise and it is our opinion that not only does ITS not maintain this kind of process expertise but also that it does not currently play the kind of pro-active role within the Library required to deploy this expertise successfully.

Standard HRS Operating Procedures: The Inspector General's recommendation to develop standard operating procedures regarding hiring procedures is important. HRS should be tasked with brokering a master document for the application parameters and requirements of Appendix. B, with attendant critical steps and checklists for processes that must be followed for every hiring action. Once that document has been created and vetted with key stakeholders, each Service Unit should create their own operating procedures that include the core functions covered in HRS' document.

<u>Contract Negotiation</u>: Effective contract negotiation would require the person be familiar with the process of vetting such options against other market options and internal build options, the cost of each and the appropriate and accurate balance between systems costs and services costs required for success. This expertise does not currently exist in the Library.

<u>Business Case Analysis</u>: While a valuable exercise, business case development is often just that. In other words, it helps with the financial justification for a decision but without the requisite expertise would have failed to accurately capture the inherent costs in the Avue implementation. In the future, such an exercise should certainly be undertaken but with the direct involvement of the person described as above who is familiar with the costs involved.

Cc: General Scott Karen Wood Lucy Suddreth

Appendix D

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United States Government Memorandum

Library of Congress

Office of the Librarian

Planning, Management, and

Evaluation Directorate

Date: December 18, 2001December 17, 2001

To: Inspector General's office

From: Appendix B Implementation Team

Subject: Responses to specific recommendations in the IG's report tasking Appendix B

Implementation Team

Help desk

We agree there needs to be a rationalized help desk but strongly recommend that the Appendix B Implementation Team direct its design and implementation. The primary reason for this is that there is a widespread lack of understanding of the several distinct help desk functions, only some of which should reside in HRS. Here is a summary of those help desk functions:

Customer/Requirement	Job status check	Technical problems	Technical changes	Content changes
Internal users	HRS	HRS	TBD 1	TBD 2
Internal applicants	HRS	HRS	-	-
External applicants	HRS	HRS	-	-

The HRS help desk should include well-trained individuals knowledgeable in AVUE functionality, Library HRS processes and service unit procedures. The HRS help desk should document and regularly report their work and findings to the service units and the Deputy Librarian. Customers and Library employees should be routed, via a menu driven telephone number, to the appropriate Library contact person or help desk representative. The HRS jobs section on the LOC Web site should log and answer FAQs so that all applicants can benefit from the information provided.

TBD 1 should be someone versed in product requirements gathering and prioritization. It should be noted that AVUE was constructed as a **manager** driven system and not an **HR driven system**. Therefore, HRS should not drive the change request process. Additionally HRS lacks the systems expertise to execute this function. TBD 1 will be a valuable resource going forward as Avue is certainly not the last time the Library will be faced with such an opportunity and challenge and the Library should be prepared for a potential increase in such evaluative needs.

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TBD 2 should be someone who is very well versed in job analysis, in the unique requirements and context of the Library, and can understand how Avue operates at a very basic level. As long as the Library is under Appendix B, its requirements will be so unique and taxing of the job analysis process and whatever system the Library chooses to support this that the need for such a person will be high.

Neither of these roles have been identified to date and neither should reside in HRS. A a Library-wide resource should be considered to play both roles.

Requirements gathering

The Appendix B Implementation Team should take the lead in gathering and documenting user requirements for the automated hiring system. As discussed in the IG repot, requirements were never gathered and have still not been gathered with regard to the specifications of an automated hiring system. Regardless of whether the Library decides to continue with Avue, such requirements must be gathered and documented. This document is vitally important for three reasons:

- To serve as a baseline for the articulation and prioritization of change requests going forward.
- 2. To provide specifications for the identification and comparison of alternatives should the Library decide to explore options other than Avue.
- 3. To prompt the Library, and specifically HRS, to articulate its data architecture for warehousing job analysis content that is currently only captured in Avue or at the service unit level in ad hoc PC based formats.

Preparation of a post-implementation review report.

The Appendix B Implementation Team will conduct a post-implementation report, but we disagree with the Inspector General's recommendation to conduct and produce the report by December 19, 2001. This is clearly an unreasonable timeframe. We suggest an alternative date of April 1.

Cc: General Scott Karen Wood Lucy Suddreth

Appendix E (Page 1 of 11)



Memorandum

December 13, 2001

TO: Donald L. Scott, Deputy Librarian

Karl W. Schornagel, Inspector General

FROM: Daniel P. Mulhollan Director

SUBJECT: CRS Response to Draft Audit Report

Attached are our comments on the Draft Audit Report No. 2001-IT-305/November 2001, "Library Wide New Hiring Process and System: Project Management and Contracting Improvements Needed Report." I regret the delay in getting this to you, but as I indicated in my e-mail, we wanted to ensure that our response is helpful, accurate and comprehensive.

Attachment

cc: Thomas Bryant

Congressional Research Service Washington, D.C. 20540-7000

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December 13, 2001

CRS comments, as requested, on Library Wide New Hiring Process and System: Project Management and Contracting Improvements Needed, prepared by the Library of Congress Office of the Inspector General, draft dated November 30, 2001

The draft identifies significant problems with implementing the Library's revised hiring process and automated system and recommends a number of appropriate steps to help resolve those problems. The findings reported in the draft are consistent with and at times directly reflect CRS experiences with implementation over the last year or more.

At the same time, addressing several important issues would strengthen the draft and, in some cases, make it a more consistently accurate document. These are as follows:

- The report should clearly and accurately state the significant adverse impact that implementation has had on hiring. As it stands the draft gives the impression that resulting constraints on hiring have not been consequential (see especially pages 5-6) by indicating that, although hiring has been "delayed," progress has been made. The reality for CRS is that, for more than ten months, CRS has experienced a virtual, extended moratorium on hiring; since February 5, 2000, CRS has been able to post only one vacancy for a position covered by amended Appendix B. As of this time, CRS has not been able to fill 45 positions, seven percent of our funded staffing strength. The CRS staffing plan for FY2000 has not been fully implemented. Staffing requirements for FY2001 have not been addressed at all. Prospects for meeting our FY2002 needs are not favorable.
- A systematic evaluation of the current and prospective status of the implementation of the amended merit selection process is absolutely essential and should be undertaken immediately. This evaluation should employ objective standards to review performance of the selection process. It has been one year since the Library began working on implementation issues arising from the new merit selection process and devoting significant resources to this effort. The experiences to date consistently point to problems the Library continues to face with the new process. A performance review of this nature would offer an analytic basis for determining the feasibility of continuing with the current process. The results of this performance review could be used to determine feasible next steps if it becomes clear that the current process is not working. And finally, the results of this evaluation could be used to help inform the Congress as it continues to review the Library's operating plan and the progress the Library is making in filling its critical positions.
- The report should signal more explicitly that significant implementation problems have continued after the Inspector General (IG) issued interim guidance to the Library in August and September, after the Library responded to such guidance, and after the formal time period of the IG investigation ended. The IG is aware of continuing significant implementation problems as demonstrated by the statement in the draft that the Library is still not documenting in writing changes requested in the contractor's automated system (and not succeeding in obtaining changes it needs). For whatever reasons, other troubling examples of continuing problems abound. By not raising a caution flag in the form of explicitly acknowledging these continuing problems, the draft gives the impression that the Library should commit to a possibly lengthy

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process of following the IG recommendations before reevaluating its investment in ADS and in the amended Appendix B itself.

The following notes help to elucidate these points, provide some additional insights and observations, and offer factual clarifications.

A. General Comments

1. It might be useful to point out in the report that the audit is limited to the time period prior to the appointment of a new project manager. The audit documents many of the actions and issues as we understood them by September of this year. However, since September, several of the Service Units have actually posted jobs and we have all been heavily engaged in job analysis work. Many additional issues have arisen during this time period which are not documented in the report. For example, as we have become heavily involved in job analysis, it is clear that the ADS system itself presents some obstacles to efficiently accomplishing the job analysis work required by Appendix B. For example, the system does not provide online access to interview questions and benchmarks and so changes made by the SMEs cannot be made online. While the system does provide online access to edit the job analysis worksheet, it is not possible to add to the number of KSAOs online. You can only delete or edit online the number of KSAOs as originally provided by the system. If the SME panel wants to add KSAOs, the data must be entered at the Avue Victoria location, which further slows down the process.

We have also been unable to maintain a "record copy" of position descriptions in the system, even after they have been certified by HR. The data seems to change in the system when Avue does system upgrades. Hence, in some cases, when a job analysis panel meets, the position description provided by the system has changed, or the pd has changed by the time of posting. This has resulted in having to continually edit the same position description in the system to ensure it matches the one that has been certified. We have also had cases when the applicant questionnaire has changed from what the SME panel approved by the time of posting. This necessitates that we review not only the vacancy announcement but also the applicant questionnaire against the paper copy signed by the SMEs prior to posting. And those units which have actually posted jobs and completed the selection process have many other examples of issues that are not documented in the current report. Of course, all these concerns only re-enforce the need to quickly act on the recommendation to develop performance metrics for both the ADS system and the Appendix B process and a post-implementation review plan so we can begin to document and evaluate whether the ADS system and the current hiring process are functioning properly and meeting the Library's needs.

- 2. We believe that one recommendation that should be considered is to redefine the ADS/Appendix B Implementation Project as a re-engineering project. Although the report makes clear in several places that the Appendix B and ADS have effectively changed our classification and staffing processes dramatically and should have been identified as a re-engineering project (p. 9), it might be helpful to include a specific recommendation to that end. Until we begin treating the entire project systematically as a re-engineering effort to conform to Appendix B requirements, we fear ad hoc decisions will continue to be made without a clear understanding of their implications. Additionally, if the project were treated as a re-engineering effort, we would be more likely to add some staff to the project team with BPR expertise.
- 3. Clearly the role of the Administrative Staff in this process is a theme in many parts of the report. What is unclear is why this has become such a critical issue. The report seems to indicate, for example, on page 13, that the service unit administrative officers prepared position descriptions and

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had final approval over staffing tasks such as preparing and analyzing knowledge, skills, and abilities. That was certainly not the case for CRS or many other parts of the Library. The staffing tasks related to job analysis were in fact performed by contractors hired under a CRS non-personal services contract. What is particularly problematic here is that HRS subscribed to a system that would make it impossible for contractors to access the ADS system to continue to facilitate job analysis, but did not make plans for who would replace those contractors when the time came. This was certainly not in the Library's best interest and is directly related to the findings on page 20 related to the Kelly Anderson and Associates consulting contract. This leaves the Library in the position of using administrative staff to facilitate job analysis, contract with other contractors to facilitate job analysis and provide a clerical person to make the changes for the contractor, or contract directly with Avue, the vendor who refuses to allow the Library to provide access to their system to anyone other than an LC employee. And the fact that the Avue subscription continues to prevent contractors from accessing the system has implications reaching far beyond job analysis to any HR functions we may want to contract that is related at all to the ADS system.

- 4. We believe the impact of the hiring delays is understated in the Findings and Recommendations section. While it is clear that the Library has posted 94 vacancies between May and September, it is not clear that some units of the Library have not posted a single vacancy despite dedicating significant resources to the effort. Perhaps adding a Table in the Findings and Recommendations Section charting the posting and selections by Library Service or Infrastructure Unit would clarify the impact of the delays.
- 5. In some cases, the report understates the degree of technical problems we are having with ADS. For example, on page 11, the report includes a statement that "there were many initial technical problems with ADS and users lost confidence in the system, contributing to delayed vacancy announcements." The implication is that many of the initial technical problems have been solved, however, in fact, we continue to experience technical problems such as position descriptions changing in the system when Avue makes system upgrades. In addition, the statement implies that "lost confidence" contributed to delays. Despite problems with the system CRS top managers and staff contributed consistently and fully to all of the Library's efforts to implement Appendix B. They have dedicated an enormous amount of time to these efforts and have continually offered suggestions on how to deal with recurring implementation problems. At no point has CRS flagged in its efforts since December 2000 to make the system work.

B. Findings and Recommendations

I. A Project Management Framework Needs to be Established and Applied to the Current ADS and Amended Appendix B Hiring Process.

While we agree that the Library needs to adopt a framework for project management for all projects, we do not think the timeline of doing so by March 31, 2002 is realistic. The Director of PMED is now the implementation project manager for the ADS and Amended Appendix B Hiring Process and he and his staff will be consumed for many months in actually managing this project. Perhaps a better approach would be that PMED develop a project management framework for this project and use it as a pilot for an agency-wide project management framework. Once the Library resolves many of the critical issues facing us with this project, the Library could evaluate the framework as a model for the agency, revise it as needed, and then adopt as an agency regulation. Our biggest concern right now is to spend all the resources necessary to solve our problems with this ADS and Appendix B process and establishing

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agency-wide regulations for project management will distract from that task. A more realistic goal might be to adopt such a framework by the end of the fiscal year.

The IG could also consider dividing this recommendation into two separate recommendations: one specifically focused on adopting a Library-wide project management framework and one specifically focused on establishing a project management framework specifically for ADS and the Appendix B process. That might make clearer which of the sub-recommendations are broadly applicable and which are specific to improving management of the ADS and Appendix B projects.

I.A. A Project Manager Needs to be Assigned.

I.A.1. The project manager should be actively involved in project reviews. The project manager should immediately review current resource requirements and dedicate additional resources as necessary to ensure successful completion of the project, including consideration of contract services.

We endorse this recommendation for a general project management framework. However, in reality, if a project manager, including the new ADS/Appendix B project manager, requires additional resources outside his/her own work unit, won't additional resources have to be requested at the EC level and approved by the Librarian or his designee?

I.A.2. The Library should take steps to ensure that a project manager possessing the requisite skills and/or training is assigned to all future projects.

We strongly endorse this recommendation. Does "the Library" refer to the Librarian, the Deputy Librarian, or the senior manager to whom the project manager will report?

I.B. Project and Team Members Roles and Responsibilities Should be Clearly Defined.

Senior managers should clearly describe the projects, providing clear written statements defining the nature and scope before work begins. The project description should identify team members, define the skills required for staff members assigned to the project, and define the authorities and responsibilities of the project team members.

We strongly endorse this recommendation, but we are unclear as to whom is meant by "senior managers."

I.C. Project Plans Should be Developed and Deployed

The project manager should ensure that project master, quality assurance, test, and training plans are developed as soon as possible.

We strongly endorse this recommendation.

I.D. Primary Users and Technical Experts Should be Involved in Requirements Definition and Implementation.

The project manager should ensure that ITS is involved in any future automation-related HRS projects. ITS should be involved in developing system requirements and testing the compatibility

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of any new systems with the existing hardware and software architecture. Further, ITS should be included in future contract negotiations to provide technical advice.

We strongly endorse this recommendation, but would like to include that primary users from the Service Units should be involved in requirements definition and implementation. As is pointed out in the report, users were not involved to the extent needed to thoroughly define the Library's requirements to implement the Amended Appendix B and to automate the classification and staffing functions. In fact, we are unaware that any requirements at all were documented. We are particularly concerned about this recommendation because even with the new ADS/Appendix B Implementation Project Manager, we are unclear as to the role the Service Units and ITS will play in defining requirements.

I.E. Executive Committee Project Approval Should be Clearly Documented.

We recommend that senior management approve all projects in writing. This approval should describe the basis for approval (e.g. costs and benefits analysis) and senior management's understanding of the project scope and objectives. Further, we recommend that senior management obtain assistance from the Office of the Inspector General to audit the validity of information it relies on to make important programmatic decisions.

We are unclear whether these recommendations apply to the Executive Committee or senior management or the Librarian or his designee. The Executive Committee is able to make decisions applicable to the entire Library only to the extent that it is given authority by the Librarian. Dr. Billington or his designee has ultimate responsibility for approving Library-wide projects. We do agree that the Librarian should document approval of all projects in writing as described in the above recommendation. We also believe that a recommendation should be included that all Executive Committee deliberations on such projects be adequately documented for record purposes. Finally, we understand the reason for the recommendation that the OIG audit the validity of information it relies on to make important decisions, but we find it to be disturbing that this should be the case. It would be far better if the Librarian and the EC could rely on the validity of the analysis it receives from Library staff rather than depending on the OIG for a review.

I.F. A Post-Implementation Review Plan Needs to be Developed and Implemented

The project manager should immediately develop a post-implementation review plan to include:

- 1. Analyzing the Library's new hiring process and system to determine if the Library's hiring needs are being met, etc. This evaluation should be completed by December 19, 2001.
- 2. Developing a contingency plan for posting and filling vacancy announcements to ensure the Library can continue its mission. This should be accomplished by January 22, 2002.
- 3. Evaluating alternative systems and alternate or modified processes if post-implementation review indicates that ADS or the new hiring process are not meeting the Library's needs. This analysis should focus on identifying automated systems which meet the Library's requirements as documented in detailed operating procedures (as recommended in finding II below). This analysis should be completed by January 22, 2002.

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We strongly endorse all the recommendations. If it is decided that the Library's hiring needs are not being met, and clearly for CRS they are not, we believe that the Library may need additional time to fully document requirements for other systems and detailed operating procedures before we can fairly evaluate alternative systems. We strongly recommend under #3 that we approach this as a re-engineering project and create a workable "To-Be" model that conforms to Appendix B. Then we can create, test and finalize operating procedures for the new model and evaluate automation alternatives. The implication of this is that the Library will need to continue to use the ADS system or go back to Court.

II. Documented Hiring Procedures Need to be Issued.

HRS should develop detailed operating procedures as soon as possible covering the new hiring process and use of ADS.

While we agree that the Library needs to develop standard operating procedures, we believe that we need to map the process before we create procedures to implement. The process described in Appendix B is meant to be at a high level and does not include detailed operating procedures. We believe that the ADS/Appendix B project manager should lead the effort to map the process and develop operating procedures and the effort should include HRS, OGC, and Service Unit representatives. Based on the experience of the past year, we know that many policy issues will arise as we start working through this process and procedures and we must be sure that all stakeholders are involved in the process. It is also clear that many issues will arise that are not specifically associated with Appendix B, but are related to the classification and staffing process. For example, we do not only classify jobs to fill vacancies, but also as part of reorganizations. How do ADS procedures for classification change when the reason for the classification action is not to fill a vacancy? Finally, the project team needs to include staff with expertise in developing new processes with implementing procedures. We do believe the work on mapping this process and creating procedures should begin in January 2002, as soon as possible.

III. HRS Should Centralize and Document Its Help Desk.

Recommendation: HRS should establish a Help Desk function that documents and tracks user questions for all ADS modules. This Help Desk function should be centralized and utilize a spreadsheet or database that is accessible to all HRS staff so that all issues are documented and addressed in one location. Individuals assigned to the Help Desk should have sufficient knowledge and training to provide timely answers. Further this process should be described in detailed operating procedures.

We concur with this recommendation, but would add that standard reports of incidents, problems, and errors would be shared with the EC. In addition, we believe that we need a mechanism to simply report and share issues, even if an answer from the Help Desk is not required. Perhaps this could be considered as a separate recommendation or as part of creating performance metrics and the post-implementation review plan. As it stands, we have no way of knowing how common an issue is because we are not centrally recording them. For example, until recently, as far as we knew, CRS was the only unit experiencing changes in their position descriptions and data within their files. Other units are having the same problem. Perhaps a common user forum, such as a listsery to which all users could post comments, could meet our needs.

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Additionally, we are very concerned that we are not adequately tracking the experiences applicants are having. We should be collecting performance feedback on the applicant processes now. The information captured in HRS through this means should be systematically shared with the Service Units on a timely and unfiltered basis.

IV. HRS Should Consistently Use the AT Configuration Change Request Process.

We recommend that the Library document its administrative officer access level requirements in AT's configuration management system. Further, we recommend that the Library not rely exclusively on the contractor to document user requirements.

We concur with the direction of this recommendation, but think it should be strengthened to protect the Library's interest. The Change Request Process should be managed by the COTR, who is now the Director of PMED. The Project Manager/COTR should replace HRS in the overall recommendation. Shouldn't the COTR or his/her project team document user requirements and system change requests? Since this past summer, we have been told a systems change was going to be made and then nothing happens. We were also told that system change requests would be documented and shared with project management coordinators from the Service Units and, to date, this still hasn't happened. For example, we were told months ago that Avue would add a question to the applicant interface through which we could track the effectiveness of recruitment sources by asking applicants how they learned about the job. The Library has done this for many years. Because we spend quite a bit of taxpayer dollars on recruitment, we want to be able to assess which sources are useful and discontinue those that are not. However, although we have been asking for this since August and have been told the feature would be added, it has not been and CRS is beginning to post positions. Without documentation of change requests, we have no idea if the Library even asked Avue to effect this change. We hope this recommendation can be implemented immediately for the best interests of the Library.

V. The Library Should Negotiate More Favorable Contract Terms and Prices for Future Personnel Subscription Services.

- V.A. Contracts Should be Negotiated to Protect the Library's Interests and Represent Best Value.
- V.1. The Library should negotiate contracts with the assistance of technical experts, OGC. the project manager, and Contracts Services.
- V.2. The COTR should be issued a Letter of Delegation describing the 'authorities and duties' and the limitations of the position.
- V.3. The Library should decide if and when the workforce management and workers compensation modules will be implemented. The decision should be made by January 22, 2002 to coincide with the evaluation of current contracting services and the new hiring process, etc.

We concur strongly with all the recommendations. However, we are concerned that the Library has in fact renewed the subscription with Avue, which still will not allow contractors into the system. This has the effect of making Avue a sole source contractor for any HR services that require the use of the ADS system. The report touches on this on page 19 when it states, "Because the AT contract contained a restrictive consulting clause, KA did not have direct access to the ADS system and was therefore somewhat limited in its support. The limitation

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necessitated paying higher fees for AT consulting services." Perhaps the longer-term implications of this type of relationship with AT could be pointed out in the report in the context of protecting the Library's interest and representing best value.

We also want to note that any decision on deploying the workforce management and workers compensation modules should only be taken upon the evaluation of current contracting services (as noted in the recommendation) as well as existing competencies and resources in HR and only after a definition of the Library's requirements for those modules has been developed.

V.B. Contracts Awards Should Have a Legal Sufficiency Review

We recommend that the OGC; Head of Contracts; Chief, Contracts Services; Deputy Librarian of Congress; and the Librarian of Congress or his designee review all contract awards as prescribed in LCR 1614-2.

We fully concur.

V.C. Contractor Source Selection Analysis Should be Documented.

A Library contracting officer must make all future Library source selection decisions with the assistance of the service units and other specialists, as needed. For example, ITS should be consulted if the acquisition involved information technology.

We fully concur. However, we are unclear about one point in the narrative within this section. On page 21, the report indicates that HRS did not believe it was necessary to prepare a detailed analysis because AT was the only vendor capable of complying with the Cook case settlement and the required 120-day implementation period. HRS signed the subscription in September and October of 2000, prior to the finalization of the Cook case settlement. While AT claimed it could implement it's system in 120 days and HRS, with its inexperience in process design and systems implementation, could have assumed that was true; the ADS system did and does not have the full functionality we need to actually implement Appendix B, as noted above regarding the Interview Questions and Benchmarks. How could HRS have determined that AT could meet Amended Appendix B requirements when they have not been finalized?

V.D. The Library Should Purchase Only Necessary FTE Subscription Levels.

The Contracting Officer should include the FTE subscription level in the negotiation strategy if the Library exercises future AT contract options.

Obviously, we concur. Additionally, the report states that the Library negotiator was not aware that there were different prices for different FTE levels and therefore did not attempt to obtain the most favorable pricing. The presentation to the EC in September 2000 included the different price levels as part of the presentation, so how could the Library's negotiator be unaware of this?

VI. Business Case Analyses Presented to the Executive Committee Should be Better Supported.

The EC should require that future cost and benefits alternatives analyses be prepared in accordance with FSD Directive 01-01. This directive should be supplemented with aditional guidance from GAO, such as calculation of return on investment, payback periods, segregation of cost as recurring

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or non-recurring, and other specific criteria on preparation and documentation of cost estimates. The EC should also submit sensitive or high dollar cost and benefits analyses to the Office of Inspector General for audit.

We concur with the overall recommendation. However, the EC can't require that analyses be prepared in accordance with FSD Directive 01-01. The Librarian requires that through the issuance of the directive. Perhaps the EC should be replaced in the specific recommendation by the Librarian.

C. Clarification of Facts

- 1. The report should clarify that the positions covered by Appendix B are professional, administrative, and supervisory technical. Not all these categories are included when Appendix B positions are referred to throughout the report.
- 2. The report implies that administrative staff had traditionally participated in creating and approving position descriptions, and modifying KSAO's. The selecting official has always created and approved position description while the responsibility for developing and modifying KSAO's has always resided with the Subject Matter Experts (SMEs) on the job analysis panels.
- 3. The new hiring process described in the introduction does not accurately reflect the process as outlined in Appendix B. For example, the SME panel approves the applicant questionnaire and other job analysis documentation.
- 4. The description of the Workforce Management and Workers Compensation modules in the Introduction appears to come from advertisements from Avue Technologies. If this is so, perhaps the report should acknowledge this since the descriptions use qualitative terminology that the Library cannot confirm since it has no experience with these modules.
- 5. The purpose of the Hiring Improvement Process (HIP) team or the fact that it is no longer in existence, is not clear. The HIP team was created by the HR21 Steering Committee as one of the two teams assigned to assist in the development of the HR21 Strategic Plan that was completed in November 1999. One of the goals of the Strategic Plan was to automate the hiring process. The review of the four products by the HIP team (which included CoHo/CoHo Casting, an earlier version of ADS) was accomplished in August 1999 without defined requirements or connection to the Library's efforts to reach an agreement in the Cook case. It was not until the following year (September 2000) that ADS was identified as the automated system the Library would use to implement Appendix B.
- 6. On page 5, the report states that service units did not begin posting vacancy announcements under ADS until May 2001 because of the number of vacancies already in progress under the old selection process. This statement seems to imply that there was no effort being taken to fill positions under the new selection process until May. This is not true for CRS. The fact that there were a number of postings in progress under the old system had nothing to do with our efforts to implement the ADS system. Since December 2000, CRS has been working diligently to get positions filled under that system. It has taken us until December 2001 to post one position under the ADS system.
- 7. Perhaps the first paragraph under Background should be reviewed by the Office of General Counsel. For example, it is unclear as to what the statement "the Court ruled for the plaintiffs" refers since the Court did not appoint a Receiver.
- 8. There are a number of statements in the report that suggest that because "users lacked confidence in the process," they did not support implementation of the new hiring process. That was definitely not the

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case in CRS. Beginning in December 2000, CRS assigned senior level managers and administrative staff to the drive teams set up to implement this process. Even though the drive team approach was unsuccessful and extremely frustrating at times, we have continued to devote extensive time and resources to this effort. We are committed to doing everything we can to ensure a content valid hiring process.

- 9. On the top of page 11 in the report it states that when CRS was ready to test content in the database, no data was available. This is not quite accurate. When CRS first began working with the ADS system, there was data in the system but it was not relevant to our needs. In April 2001, there was a separate effort led by the CRS project manager to have ADS enter CRS relevant content. ADS agreed to enter this content as well as CRS edits. However, in June the data had disappeared from the system. As a result, ADS had to rekey the data in their system. This was not done until August 2001.
- 10. The statement in the first paragraph on Page 13, that "No one appeared to understand that only the position duties, not the complete position description, would be included in the ADS database" is misleading. Appendix B specifically states that the automated system would have in its database the Library's existing position descriptions and job analyses. So the expectation was that this data would be included in the system upon implementation. Perhaps there was some misunderstanding on the part of Avue which could have only come from HRS's negligence—in communicating to Avue this requirement when the contract was let. There is another inaccurate statement in this paragraph. As noted above, the administrative officers did not have final approval over staffing tasks such as preparing and analyzing knowledge, skills, and abilities.
- 11. The report refers to administrative staff in some places and administrative officers in others. Since not all administrative staff involved in the hiring process are administrative officers, perhaps it would be more appropriate to use the term administrative staff throughout.

Appendix F

UNITED STATES GOVERNMENT

Memorandum

Office of the Librarian
Library of Congress

DATE: December 14, 2001

TO : Karl Schornagel

Inspector General

FROM : Jo Ann Jenkins

Chief of Staff

SUBJECT: Draft Audit Report 2001-IT-305

I want to commend you on the quality of this draft report. I found it logical and well-written. I believe you are setting a new standard for the advice and counsel that the Library is receiving from your efforts.

I want to share several comments, some of which I have made to you in person. In your discussion of the project manager, I think you need to be clear that HR had, indeed, appointed a project manager to implement the automated hiring system. The point is rather that the appointed project manager may have been at the wrong level in the organization, was not given the necessary authority to discharge this responsibility successfully, and did not possess the requisite skills or training to undertake this activity, which impacts the entire organization.

With regard to the data rights, my clear recollection is that, from the first confidential briefing to the EC, HR <u>and</u> the contractor stated that the Library would, indeed, "own" its data. This is a point that Dr. Billington addressed at several points in the discussion. Such an understanding lead the EC to conclude that the Library did not <u>need</u> to "develop short- and long-term contractual strategies to ensure that data-rights were protected." We were assured that we would own our data.

In the discussion on page 5 about vacancy announcements, I believe that it is more important to point out that the delay in new vacancy announcements appearing under the new system resulted from the service units' lack of confidence about the new system and their reluctance toward making the new system succeed.

In your comments on page 13 about EC decision-making, I believe that EC notes and minutes provide a written record of what information the EC considered in approving new projects.

Thank you for your efforts in this review. I look forward to seeing the final report.